

A Catalog From



5563 Sepulveda Blvd.
Culver City, CA 90230

HRS: M-F 10 AM-6 PM SAT 10 AM-5 PM
1-800-882-1343
Out-of-State

(310) 390-8003 Local/Tech • Fax (310) 390-4393

ICOM...

Bringing You the Future Now!



IC-706



IC-2710H



IC-2000H



IC-2350H



IC-821H



IC-775DSP

O **ICOM®**



IC-T22

IC-T7

Ultra Compact Dual Band Handheld **FT-50R**

One tough little dual bander!

Features

- Frequency Coverage
Wide Band Receive
RX: 76-200 MHz, 300-540
MHz, 590-999 MHz*
- TX: 144-148 MHz,
430-450 MHz
- AM Aircraft Receive
- MIL-STD 810 Rating
- Digital Coded Squelch (DCS)
- 112 Memory Channels
- 12V DC Direct Input
- High Speed Scanning
- Alphanumeric Display
- CTCSS Encode (Decode
w/FTT-12)
- Auto Range Transpond
System™ (ARTS™)
- Dual Watch
- Direct FM
- High Audio Output
- ADMS-1C Windows™
Programmable
- Four Battery Savers:
Automatic Power-Off (APO)
Receive Battery Saver (RBS)
Selectable Power Output (SPO)
Transmit Battery Saver (TBS)
- Time Out Timer (TOT)
- 2.5 and 5 Watt Versions
Available
- Optional Digital Voice
Recording System (DVRS)
- Full line of accessories



For the foremost in top-performing, durable, dual band handhelds there is one choice. The FT-50R. Manufactured to rigid commercial grade standards, the FT-50R is the only amateur dual band HT to achieve a MIL-STD 810 rating. Water-resistant construction uses weather-proof gaskets to seal major internal components against the corrosive action of dust and moisture. And, the rugged FT-50R withstands shock and vibration, so throw it in with your gear!

Dynamic and exclusive features set the FT-50R apart, too. Wide Band Receive includes 76-200 MHz (VHF), 300-540 (UHF), and 590-999 MHz*. Dual Watch checks sub-band activity while receiving on another frequency, then when a signal is detected, shifts operation to that frequency. Digital

Battery Voltage displays current operating battery voltage. Digital Coded Squelch (DCS) silently monitors busy channels. Auto Range Transpond System™ (ARTS™) uses DCS to allow two radios to track one another. And, the FT-50R is ADMS-1C Windows™ PC programming compatible, too. To round out the FT-50R, it has four battery savers, and super loud audio remarkable in an HT this size.

A reliable companion where ever you go, the FT-50R is one tough little dual bander with all the features you want!

YAESU
...leading the way.SM

For the latest Yaesu news, hottest products, visit us on the Internet: <http://www.yaesu.com>



YAESU Handheld Transceivers

One tough little dual bander!



FT-50R 5W

Dual Band Handheld

- Frequency Coverage
RX 76-200 MHz, 300-540 MHz
590-999 MHz (Cell. Blocked)
- TX 144-148 MHz, 430-450 MHz
- AM Aircraft RX
- 112 Memory channels
- Digital Coded Squelch (DCS)
- Built-in Tone Encode
- Tone Decode (opt. FTT-12)
- MIL-STD 810 Rating
- Auto Range Transpond System
- Dual Watch
- High Speed Scanning
- High Audio Output
- Selectable Power Output
- APO - Auto Power Off
- Time Out Timer (TOT)
- ADMS-1C Windows Programmable
- Optional Digital Voice Recording System FTT-12
- Approx. Size-Varies w/Battery
2.2" Wx3.9" Hx1.2" D

YAESU

FT-10RA16D

- Frequency Coverage
RX 140-174 MHz
TX 144-148 MHz
- MIL-STD 810
- 99 Memory Channels
- DTMF Auto Dial Memories
- Alphanumeric Display
- Digital Coded Squelch
- Tone Encode & Decode Built-in
- True FM
- High Audio Output
- High Speed Scanning
- APO - Auto Power Off
- Rx/Tx Battery Savers
- 12V DC Direct Input
- ADMS-1C Windows™ Programmable
- Approx. Size-Varies w/Battery
2.2" Wx3.9" Hx1.2" D



YAESU

...leading the way

FT-51R

Dual Band Handheld

- Frequency Coverage
VHF RX: 110-180 MHz
TX: 144-148 MHz
- UHF RX: 420-470 MHz
TX: 430-450 MHz
- AM Aircraft RX
- Spectrascope™ Display
- 120 Memory Channels
80 w/Alphanumerics
- Alphanumeric 8 Character Display
- Dual In-Band Receive
V+V • U+U • V+U
- DTMF Paging and Coded Squelch
- Tone Encode & Decode Built-in
- Large Backlit Keypad
- Large Backlit Display
- Auto Repeater Shift
- Auto Tone Search
- Cross Band Repeat
- Approx. Size-Varies w/Batt.



FT-11/R38B 5W • FT11R 1.5W

- Frequency Coverage
2-Meter 110-180 MHz RX
144-148 MHz TX
- AM Aircraft RX 110-136 MHz RX
- Selectable Alpha Numeric Display
- 150 Memory Channels
- 10 Memory DTMF Auto-dialer
- New Compact Battery Design
Supplied 4.8V produces 1.5 Watts
Optional 9.6V produces 5 Watts
- Built-in DTMF Paging/Codel Squelch
- Tone Encode Built-in
- Tone Decode (opt. FTS-26)
- Large Back-Lit Keypad and Display
- APO - Auto Power Off
- Rx/Tx Battery Savers



Measures Only:
4" H x 2.25" W x 1" D



FT-3000M

70 Watts
on Two Meters

- Frequency Coverage
RX 110-180 MHz
300-520 MHz
800-999 MHz
Cellular Blocked
TX 144-148 MHz
- AM Aircraft Receive 110-139 MHz
- 81 Memory Channels
- Interactive Programming
- Power Output 70/50/25/10 Watts
- Backlit DTMF Microphone
- Tone Encode Built-in
- Tone Decode (opt. FTS-27)
- DCS-Digital Coded Squelch
- Alphanumeric Display
- DC Cord • Mounting Bracket
- 5.5" W x 1.6" H x 7.1" D

1200/9600 Baud
Packet Ready!

FT-2500M 2M Mobile

Just when you thought you had the most formidable mobile built, Yaesu made the FT-2500M. It's the next evolution of powerful rugged mobile radios. The FT-2500M, based on the acceptance of the popular FT-2400H, takes its durable features, and performance then goes one better! The FT-2500M has a new easy-to-operate front panel design with rubber coated knobs and large amber display, and the Yaesu exclusive 3-Stage Advance Track Tuning feature which reduces intermodulation and front-end overload.

- Frequency Coverage
RX 140-174 MHz
TX 144-148 MHz
- Rugged Military Spec Design
- Advanced Track Tuning(ATT)
- Selectable Alpha-Numeric Display
- Largest Display Available
- Power Output 50/25/5 Watts
- Flip Down Front Control Panel
Hides Seldom Used Buttons
- Backlit DTMF Mic
- 31 Memory Channels
- Tone Encode Built-in
- Tone Decode (opt. FTS-17A)
- TOT - Time-out Timer
- Backlighting Adjustment
- APO - Auto Power Off
- DTMF Paging (Opt. FRC-6)



YAESU

*Advanced technology with
no-nonsense operating ease.*

FT-8000R Dual Band Mobile

**Now, a dual band that's
so advanced it's simple!**

- Frequency Coverage
RX 110-550 MHz, 750-1300 MHz
(Cellular Blocked)
TX 144-148 MHz, 430-450 MHz
- 3 Power Output Levels
2M 50/10/5 Watt
70cm 35/10/5 Watt
- 110 Memory Channels
- Enhanced Smart Search™
- Tone Encode Built-in
- Tone Decode (opt. FTS-22)

- Dual Rx V+V, U+U, V+U
- Crossband Repeat
- Programmable w/opt. ADMS-2C
- Auto Power Off
- MIL-STD 810 Rating
- Omni-Glow Display
- 1200/9600 bps Packet Compatible
- One DTMF Autodialer Memory per Band

5.6"W x 1.6"H x 6"D

The FT-8000R Compact Dual Band Mobile introduces industry-first features in a user friendly, easy-to-operate combination.. Built to last, the FT-8000R brings together the most-requested dual band features and a MIL-STD 810 rating, for enduring performance.



**Computer
Programmable!**

**Detachable
Front Panel!**

**Front Panel
Data Jack!**

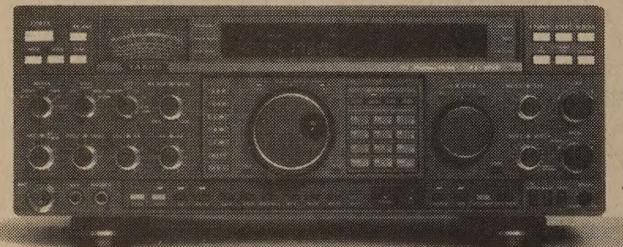
5.6"W x 1.6"H x 6.4"D

FT-8500 Dual Band Mobile

- Frequency Coverage
RX 110-174 MHz
410-500 MHz
TX 144-148 MHz
430-450 MHz
- 3 Power Output Levels
2M 50/10/5 Watt
70cm 35/10/5 Watt
- 110 Memory Channels In 5 Memory Banks
- Tone Encode Built-in
- Tone Decode (opt. FTS-22)
- Dual Rx V+V, U+U, V+U
- Crossband Repeat
- Programmable w/opt. ADMS-2C
- Auto Power Off
- MIL-STD 810 Rating
- Omni-Glow Display
- Selectable 1200/9600 bps
- 9 Memory Autodialer Memories
- Time-Out Timer
- Adj. LCD Contrast & Brightness
- 6 Character Alphanumeric Display

Yaesu did it again!

YAESU FT-1000/FT-1000D



FT-1000D HF All Mode Transceiver

Dual Channel Reception 100 kHz to 30 MHz
Two Dual Speed Tuning Knobs • Dual Display
Two Rx Front Ends and IF Strips

Front Panel Keypad For Key In Of Operating Frequency
99 Scannable Memories • Iambic Electronic Speed Keyer
Power Output Up To 200 Watts • Heavy Duty Power Supply
Automatic Antenna Tuner With 39 Memories • Hand Mic
XF-A 8.2 MHz SSB 2.0 kHz • XF-B 8.2 MHz CW 250 Hz
16.53"W x 5.90"H x 14.76"D

The Following Items Are Included With FT-1000D And Optional For The FT-1000
TCXO-1 Temperature Compensated Crystal Oscillator
BPF-1 Dual BPF for Cross Band Service
IF Crystal Filters: XF-C 455 kHz SSB 2.4 kHz
XF-D 455 kHz SSB 2.0 kHz • YF-110C 455 kHz CW 500 Hz

YAESU FT-736R

**VHF/UHF
All Mode
Transceiver**



FT-736R All Mode Multi-Band VHF/UHF

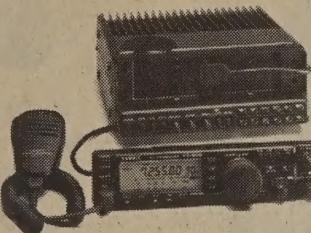
SSB • CW • FM • 144-148 MHz • 430-450 MHz
Space For Two Additional Band Units
Optional Bands 50 MHz, 220 MHz & 1.2 GHz
600 Hz CW Filter • FM Filter • Satellite Duplexer
100 General Purpose Memories
Ten Full Duplex Cross-band Memories
Tone Encode & Decode (opt. FTS-8)
Memories Store Mode and RX/TX Frequencies
Two Full Duplex VFOs Linkable For Satellite Operation
Includes Hand Mic
14.58"W x 5.07"H x 11.25"D

YAESU

Now
Collins
Mechanical Filter
Built-in



FT-900CAT



Uncompromising HF quality that will change your lifestyle. It's the first transceiver with true HF technology to go mobile in any vehicle or stay at home as a compact base station.

With its revolutionary, small, snap-off remote panel, the controls of the FT-900CAT can install almost anywhere in your car, truck or camper. Since the 100 watt RF deck can be installed under a seat or in your car trunk, it's away from critical automotive electronic wizardry.

As a base station, the compact full function FT-900CAT includes direct keypad entry for pinpoint accuracy during quick band/frequency changes. Other features you'll include CW keyer with front panel speed adjustment, speech processor, twin stacking VFOs, and IF Shift and Notch. No competitor offers this! Bonuses, such as signal strength, power output, SWR and ALC digital meters, add value to the FT-900CAT, and the proven duct-flow cooling system provides excellent long-term transmit power output reliability and frequency stability.

For sheer high-performance, anywhere, the incomparable FT-900CAT ranks with the FT-1000 to further YAESU as the choice of the world's top DX'ers.

Now
Collins
Mechanical Filter
Built-in

- Remote front panel design
- Built-in auto antenna tuner
- Direct keypad entry when used as a base station
- Large, bright omni-glow LCD display
- 100W on SSB, CW, FM modes; 25W AM
- IF Shift and 30db Notch Filter
- Digital S/RF, SWR & ALC Meters
- Programmable CTCSS Encode w/repeater offset
- Direct Digital Synthesis(DDS)
- 100 memory channels
- Frequency Range
RX: 100kHz-30 MHz
TX: 160-10 meters
- CW full break-in keying w/adj. speed
- Fast/slow AGC circuit
- Intercept Point Optimization
- Duct flow cooling system
- Twin band stacking VFOs
- Built-in noise blower
- Built-in adj. speech processor
- Hand Mic • DC Cord
- 9.3"W x 3.6"H x 9.9 "D

An HF Masterpiece, Combining the Best of Digital and RF design technology. The FT-1000MP

- EDSP-Enhanced Digital Signal Processing
- Shuttle-jog Rapid Tuning Enhancement
- Directional Tuning Scale for CW/Digital mode and clarifier offset display
- Dual In-Band Receive w/Separate S-Meters
- Selectable Antenna Jacks
- Adjustable TX Output Power
- Collins SSB Mechanical Filter Built-in
500 Hz CW Collins Filter Optional
- Selectable Cascaded Crystal and Mechanical IF Filtering
- User-programmable Tuning Steps
- Low Noise DDS Circuit
- Custom Feature Set-up via New Menu System

EDSP operates in both transmit and receive modes. On receive, the EDSP produces enhanced signal-to-noise ratio and significantly improved intelligence recovery during difficult situations involving noise and/or interference. The result of hundreds of hours of laboratory and real-world experimentation.

FT-1000MP All Mode HF Transceiver



YAESU FT-990/FT990DC



FT-990 HF All Mode Transceiver

General Coverage Receiver 100 kHz to 30 MHz
Front Panel Keypad For Direct Key Entry of Frequency
A/B VFOs & 90 Tunable Scannable Memories
Stores Frequency, Mode, IF Filter, Offset & Scan Status
Iambic Electronic Speed Keyer

Power Output Up To 100 Watts On HF Amateur Bands
Automatic Antenna Tuner With 39 Memories
Internal Heavy Duty Power Supply

XF-109C 500 Hz CW Filter
Hand Mic MH-1B8
14.48"W x 5.07"H x 13.18"D

FT-990DC

Same As FT-990

Without AC Power Supply & CW Filter.

YAESU FT-840

Compact High Performance HF Transceiver



A wealth of features and high-tech performance in the field or mobile, this HF won't break your budget. With its new intense LCD display, die-cast heat sink and internal thermally switched fan, you'll take this perfect companion with you everywhere.

- Frequency Coverage:
RX: 100 kHz-30 MHz TX: 160-10 m Amateur Bands
- 100 Memory Channels (Independent TX/RX per memory)
- Twin Band Stacking VFOs
- FM Mode (opt. FM-747)
- CW Reverse Feature • IF Shift • Bright LCD Display
- Compact Size 9.38"W x 3.63"H x 9.5"D
- Hand Mic • DC Cord

ICOM



5.5"W x 1.6"H x 8.06"D

IC-2350H

**DUAL BAND FM TRANSCEIVER
VHF 144-148 MHZ • UHF 440-450 MHZ
45 WATT VHF • 35 WATT UHF**

**Independent Controls And Switches
For Each Band**

- Independent Controls
- 110 Memory Channels
- Large Easy To Read Display
- Built-in Duplexer
- Built-in Tone Encoder
- Auto Repeater Shift
- Wide Band 118-174 MHz
- Direct Frequency Input (opt. UT-101)
- 2.4 Watts Audio
- Tone Scan & Tone Decode (Opt. UT-89)
- Pager & Code Squelch (opt. UT-101)
- Adjustable Attenuator

**A Combination of Great Features at
a Very Affordable Price!**

**New Lower
Price!**

ICOM



5.5"W x 1.6"H x 6.7"D

IC-2000H

IC-2710H



5.5"W x 1.6"H x 8.38"D

ICOM

**DUAL BAND FM TRANSCEIVER
VHF 144-148 MHZ • UHF 440-450 MHZ
50 WATT VHF • 35 WATT UHF**

- Detachable Front Panel
- 220 Total Memory Locations
- Full Remote Control Microphone With HM-98 Included
- Large Easy To Read Display
- Built-in Duplexer
- Built-in Tone Encoder
- 8 DTMF Autodial Memories
- Wide Band Receive 118-174 MHz, 400-470 MHz
- Direct Frequency Input
- V/V or U/U - Simultaneous Receive of 2 Signals on the Same Band
- 2.4 Watts Audio
- Tone Decode (Optional UT-104)
- Pager and Code Squelch (Optional UT-49)

IC-2710H - Easy Control on the GO!

**ICOM's New Dual Bander
Has an Easy to Use
Full Control Mic!**

**2M FM 50 WATT TRANSCEIVER
Rx 118-174 MHz • 118-136 MHz AM Tx 140-150 MHz**

**IC-W32A
DUAL BAND 2M/70CM
5 WATT HANDHELD**

Rx 118-174 MHz • 440-470 MHz
Tx 144-148 MHz • 440-450 MHz

**5
Watt**

- Dual Receive
- Dual Display
- 100 Memory Channels Each Band
- Tone Decode Standard
- Tone Encode Built-in
- Easy-To-Read Display
- PC Programmable
- Alphanumeric Capability
- Receive V/V, U/U, V/U
- Separate Speaker Controls
- Improved Audio
- 2.2"W x 4.9"H x 1.2D"

Similar
to above

**IC-T22A
2M HANDHELD • 3 WATT**

Rx 136-174 MHz • Tx 144-148 MHz

- 80 Memory Channels 40 When Using Alphanumerics
- Built-in Pager & Code Squelch
- Built-in Tone Encode
- Tone Decode (opt. UT-94)
- Alphanumeric Capability
- Easy-To-Read Display
- 5 DTMF Memory Autodialer
- LCD backlighting
- AM Aircraft Receive
- 2.25"W x 4.81"H x 1.13"D

**IC-T7A
Dual Band Handheld**

- 60 Memory Channels
- 3 Watt w/BP-180 Included
- Built-in Tone Encode & Tone Squelch
- Tone Scan Included
- Easy-To-Read Display
- 9 DTMF Memory Autodialer
- Low Power Option
- Auto Repeater Function
- Power Saver Function
- 2.25"W x 4.8"H x 1.13"D

**Powerful Versatility
In A Rugged,
User-Friendly
Handheld**

IC-775DSP



REVOLUTIONARY IF-DSP TECHNOLOGY

- ICOM DSP on Transmit and Receive
- 200 Watt MOS FET PA w/Built-in Power Supply
- Dual Receive • Twin Pass Band Tuning
- Built-in Automatic Tuner • Dual Receive
- Digital Noise Reduction & Filtering
- Digital Low and High Pass Filters
- Digital Automatic Notch
- Digital Ultra-Narrow CW Filter
- HF Packet Ready • Memory CW Keyer
- 99 Memory Channels • RTTY/DATA Mode
- Built-in Automatic Antenna Tuner

IC-707



IC-707

100 Watt HF Transceiver
Rx 500 KHz - 30 MHz
SSB/CW/AM • 32 Memory Channels
FM Optional w/UI-9
LCD Display • Front Mount Speaker
Hand Mic • DC Cord
9.4W x 3.7H x 9.4D in

IC-756

H F + 6 M T R A N S C E I V E R

with DSP

Coming Soon!

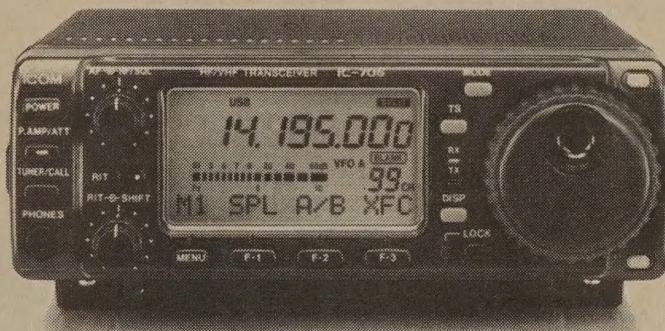
Simply The Best!

ICOM

IC-706

HF + 6M + 2M

You've got to get one!



Powerful 100 w from HF to 50 MHz and 10 W for 144 MHz

101 Memory Channels with Dotmatrix Display

All Mode including SSB, CW, RTTY, AM and FM

- 100W on HF & 6 meters, 10W on 2 meters
- Weighs only 5 1/2 pounds
- General Coverage Rx • User friendly design
- Super compact 6.56"W x 2.25"H x 7.88"D
- Removable, remoteable front panel controls all features
- Continuously receive 30 kHz to 200 MHz
- Large LCD display featuring alphanumeric memory names & soft key descriptions
- IF shift interference rejection
- Spectrum scope frequency function

*The New Leader
In Satellite
Communications!*



IC-821H

Dual Band All Mode Transceiver

45 W (FM, CW), 35/6 W (SSB) VHF • 40 W (FM, CW), 30/6 W (SSB) UHF

- Built-in Auto Satellite Functions
- 2 VFOs Each for VHF and UHF Bands
- All Modes In A Compact Case 9.5"W x 2.7"H x 10.0"D
- 160 Memory Channels
- "Plug And Play" 9600 bps Operations
- Stereo Headphone Jack
- Built-in High Stability Crystal (+- 3 ppm)
- 2 Antenna Connectors
- Independent Controls with Sub Tuning
- Noise Blanker • RIT Function
- IF Shift (electronically shifts for effective interference reductions)
- Satellite Memory and Tracking Function (rev./normal tracking on main/sub band)
- Doppler Compensation Function
- Built-in electronic keyer
- Data Jack for Packet Ops (9600 bps)
- CW Semi-Break In and Side Tone
- AF Speech Compressor (audio)
- CW Narrow Filter (optional)

KENWOOD

**Kenwood's High-Performance
TS-450SAT/TS450S/TS-690S**



160m to 10m amateur band operation with 500 kHz to 30 MHz general coverage receiver
TS690S Includes 6m amateur band operation 50 to 54 MHz 50 Watts On 6m

- 100 Memory Channels
- Automatic Antenna Tuner 80-10M Included In TS450SAT Only
- 100 Watts Output Power
- Direct Keyboard Input of Frequency
- IF Shift Tuning
- Tunable AF Notch Filter
- Requires 13.8V Power Supply
- 10.63" W x 3.78" H x 12.01" D

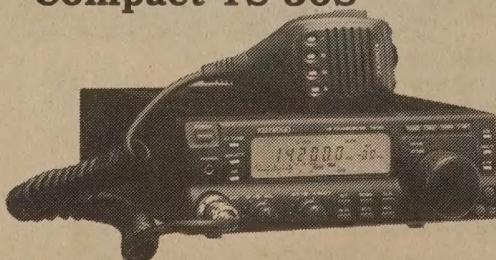


Kenwood's Competition Class TS-850SAT

160m to 10m amateur band operation with 100 kHz to 30 MHz general coverage receiver

- 100 Memory Channels
- 100 Watts Output Power
- Built-in Automatic Antenna Tuner
- IF Slope Tuning • Auto SWR Meter
- Dual-mode Noise Blanker With Level Control
- Requires 13.8V Power Supply
- 12.99" W x 4.72" H x 13.15" D

Kenwood's Compact TS-50S



160m to 10m amateur band operation with 500 kHz to 30 MHz general coverage receiver

Kenwood's TS-60S:

50 MHz All Mode Transceiver

The new TS-60S is a 50 MHz all-mode transceiver that's small enough for mobile or DX-expedition use, yet delivers an impressive 90 watts output.



Affordable DSP

The New Kenwood TS-570D

- 16-bit DSP technology for superb audio quality on both transmit and receive
- Scrolling Menu system offers 46 types of functions
- Automatic antenna tuner
- Dedicated packet port
- CW Auto Tune
- Radio Control Program software allows PC control of radio
- RS-232 computer port for up to 57,600 bps PC control
- Electronic Keyer
- TX: 160 - 10M amateur bands
- RX: 500 KHz to 30 MHz

Coming Soon!

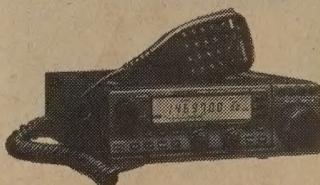
Intelligent Digital Enhanced Communications System

Kenwood's HF Treasure TS-870S



- State Of The Art IF Stage DSP
- 100 Memory Channels
- Built-in Tone Encoder
- Built-in Auto Antenna Tuner
- 5 Channel Quick Memory
- Full Scanning Capability
- IF Digital Auto-Notch
- Beat Cancel ■ Variable AGC
- 60 Second Digital Record Unit w/Opt. DRU-3
- 100 Watts Output on SSB, CW, FSK
- 100 kHz - 30 MHz General Coverage Rx
- Speech Processor
- Selectable Transmit Equalizer
- Two Noise Reduction Methods
- 57.6 Kbps Computer Control
- Easy-Acess Menu System
- Dual Antenna and Rx Out
- Voice Synthesizer Unit w/Opt. VS-2

144 MHz All Mode Transceiver



Kenwood's TM-255A:

- Frequency coverage: 144-148 MHz
- 101 memory channels ■ Dual VFOs (A & B)
- Compact design 7-1/16W x 2-3/8H x 8-1/2D in.
- 40 watts maximum output power
- Large LCD display with digital bar meter
- Twin tuning dials ■ Dual-menu system
- Tone encode built-in ■ Tone decode (opt. TSU-8)
- Built-in DTSS with page ■ AIP)

Kenwood's Innovative TM-733A

144 MHz/440 MHz • 50/35 Watts

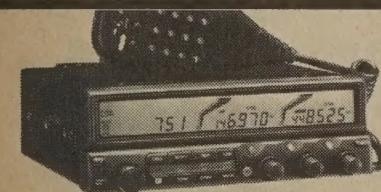


Back-lit DTMF Mic!

- Dual Band Receive V+V • U+U • U+V
- 72 Memory Channels
- Built-in DTSS Selective Calling With Page
- Built-in Tone Encoder Tone Decode (Opt. TSU-8)
- S-meter Squelch
- DC Cord • Mount Bracket

6-pin Mini DIN Connector
For 1200/9600 bps Packet

- Automatic Band Change
- Wireless Clone Function
- Dimmer Control
- Auto Power Off
- Cross Band Repeater
- Separate Speaker Terminals
- 5.5"W x 1.6"H x 6"D



Optional Band Units
28 MHz 50 Watt
50 MHz 50 Watt
220 MHz 25 Watt
1200 MHz 10 Watt

Kenwood's Versatile TM-742A

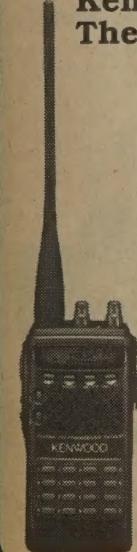
144 MHz/440 MHz • 50/35 Watts

2-plus-1 Multiband Capability In A Portable Package

- 101 Memory Channels Per Band
- DTMF Mic • DC Cord Mounting Bracket
- Direct Frequency Input From Keypad
- DTSS, Pager Function and DTMF Auto-dial Memories
- Detachable Front Panel With DFK4 or DFK7
- Cross Band Repeat
- Remote Control w/Handheld
- Dual/Triple Receive
- Tone Encode Built-in Tone Decode (opt. TSU-7)
- Clock, Timer and Calendar
- Separate Antenna Terminals For Each Band
- Separate VOL and SQL For Each Band
- Multiple Scan Modes
- Automatic band Change
- 5.91"W x 1.97"H x 6.89"D

KENWOOD

Kenwood's TH-22AT: The Compact Solution



- 3-watt output from MOS FET power module and supplied 6-volt battery
- 5-watt output with optional PB-34
- Compact design 2-3/16x4-5/8x1 in.
- Built-in DTMF keypad with monitor
- Built-in DTSS page system
- Large 1-7/16" speaker
- 41 E'PROM memory channels including 1 call channel
- Multiple scan functions VFO, call and memory
- Tone Encode Built-in Tone Decode(opt. TSU-8)
- Auto power off & battery saver circuit

KENWOOD

Kenwood's Reliable TM-261A



Rx 118-174 MHz • Tx 144-148 MHz • 50 Watts

- 61 Memory Channels
- DTSS And Pager Function Dual Tone Squelch System
- Rx AM Aircraft
- Auto Repeater Offset
- 10 Autodial Memories
- Backlit Microphone
- Large LCD Display
- 5.5"W x 1.56"H x 6.56"D
- Tone Encode Built-in
- Tone Decode (Opt..TSU-8)
- Multi-scan Capability
- 6 Digit Alphanumerics
- Time-out Timer
- DTMF Mic • DC Cord Mounting Bracket

**Shift
Into
Overdrive!**



Kenwood's TM-251A

2M TRANSCEIVER WITH UHF RX • 50 WATTS

Rx 118-174 MHZ 300-470 MHZ Tx 144-148 MHz

- 50W Output Power
- 41 Memory Channels
- S-meter Squelch
- 6-pin Mini DIN connector 1200/9600 bps packet
- Auto Repeater Offset
- Tone Encoder Built-in
- Tone Decode (Opt. TSU-8)
- 200 Memory Channels (Opt. ME-1)
- DTSS With Paging
- Built-in Digital Recording System
- Multi-function Mic With DTMF Easy to Operate
- 5 Step Dimmer Control
- 10 DTMF Autodial Memories
- 5.5"W x 1.6"H x 6.3"D

Kenwood's TH-79AD/H FM Dual Bander

Information at your fingertips. Everything you need to know about operating the new TH-79A dual bander (144 MHz/440 MHz) can be viewed in its unique dot-matrix LCD with alphanumeric display. No need for the manual.



- 2.7W output (144 MHz) 2W (440 MHz) with supplied 6V battery
- 5-watt output with optional PB-34
- Compact design 2-3/16 x 5-1/8 x 1 in.
- Dot-matrix LCD w/ menu/guide system
- 82 non-volatile memory channels
- DTMF keypad with memory function
- DTSS (Dual Tone Squelch System)
- Tone encode/decode built-in
- Auto repeater offset

ALINCO



DJ-G5

2m/70cm Handheld
2 Watt • V/V, U/U, V/U
100 Memory Channels
Rx 108-174 MHz
Rx 420-480 MHz
Rx AM Aircraft
Tx 144-148 MHz
Tx 438-450 MHz
Tone Encode & Decode
DTMF Decode
Back-lit Keypad
2.25"W x 5.5"H x 1.13"D

Channel Scope!



DJ-G1T

2M Handheld
2 Watt
80 Memory Channels
Rx 108-174 MHz
Rx 400-520 MHz
Rx AM Aircraft
Tx 144-148
Tone Encode
Tone Decode (opt. EJ-16U)
DTMF Decode
Illuminated Keypad
Auto Dialer

Channel Scope!



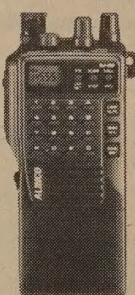
Large Display & Effortless Entry

DJ-191T

DJ-191TH

Two Meter

1.5 Watt • H 5 WATT
Rx 135-174 MHz
Tx 144-148 MHz
40 Memory Channels
9 Auto-dialer Memory Channels
Tone Encode Built-in
Tone Decode (opt. EJ-28U)
6"H x 2.25"W x 1.06"D



DJ-180T

DJ-180TH

Two Meter

2 Watt • H 5 WATT
Rx 130-174 MHz
Tx 144-148 MHz
10 Memory Channels
50 Or 200 Memories w/Option
DTMF Keyboard

Tone Encode & Decode
5 3/4"H x 2.3"W x 1.3"D



DJ-582T

2M/70CM

2 Watt/2 Watt

40 Memory Channels
Rx 130-174 MHz
Rx 400-520 MHz
Rx AM Aircraft w/Mod
Tx 144-148
Tx 440-450 MHz
Tone Encode & Decode
DTMF Decode
6"H x 2.3"W x 1.3"D

The New DR-605T Dual Band Mobile

Full 2 Meter/440 Performance at a Very Affordable Price!



Rx VHF

136-173.995 MHz

Rx UHF

420-470 MHz

Tx-VHF

144-147.995 MHz

Tx-UHF

430-449.995 MHz

■ 100 memory channels

■ Tone encode Plus tone burst

■ Cross-band repeat and full duplex

■ Tone decode (opt. EJ-24U)

■ Internal duplexer

■ 9600 bps packet ready



DR-610T

Dual Band 2M/70CM Transceiver
Detachable Front Panel (Opt EDC-2 Req'd)
50 Watt/35 Watt • 120 Mem. Channels
Tone Encode • Tone Decode (opt. EJ-24U)
DTMF Decode
Built-in Duplexer • Aircraft AM Rx
DTMF Mic • DC Cord • Mounting Bracket
5-9/10" x 2" x 7"



DR-130T

Two Meter Transceiver
50 Watt • 20 Memory Channels
100 Memory Ch (Opt. EJ-19U Req'd)
Rx 140-174 MHz • Tx 144-148 MHz
Tone Encode Built-in
Tone Decode (opt. EJ-20U)
DTMF Mic • DC Cord
Mounting Bracket
5-1/2"W x 1.5"H x 6"D

Channel Scope!

9600 bps Ready!



Air Cloning!

DR-150T

Two Meter Transceiver w/UHF Rx
50 Watt • 100 Memory Channels
Direct Frequency Entry
Rx 108-174 MHz • 440-450 MHz
Tx 144-148 MHz
Easy Access Auto-dialer
Tone Encode • Tone Decode (opt. EJ-20U)
AM Airband Rx • DTMF Decode
DTMF Mic • DC Cord • Mounting Bracket
5-1/2"W x 1.5"H x 6"D

HF + 50 MHZ ALL MODE TRANSCEIVER

• HF Bands + 50 MHZ Operation

Covers the 160 meter to 6 meter amateur bands at 100W output on HF and 10W output on 6 meters.

• Modes include SSB, CW, AM and FM

FM is standard. Try your local 10m and 6m repeaters.

• Wide range General Coverage Receiver

General coverage receiver 150 kHz to 30 MHz and 50 MHz to 54 MHz.

• 100 Memory Channels

Each memory remembers frequency & mode.

• Super Compact Body

7"W x 2.25"H x 9.05"D

• Tone Encoder Built-in

DX-70



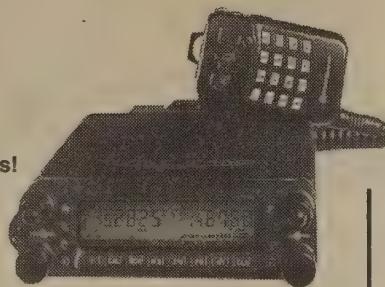
The DX-70's completely detachable front panel and the optional remote mount accessory kit are available to suit a wide range of applications. The DX-70 includes a separate multi function dial that can change bands, memory channels and channel spacing. The DX-70 gives you exceptional value with powerful CW operation.



Standard Amateur Radio

C5900DA

3 Bands...2, 70cm, & 6 meters!
One compact package.



- CTCSS Encode/Decode
- Antenna triplexer built-in
- Double balanced mixer & tracking
- Front end – tough against intermod
- 1200-9600 baud packet, etc.

C5718DA

Twin Band

- Compact with Hand Held Control/Mike
- U/U & V/V or V/U Operation
- Wide Band Receive
- 40 Memories – Expandable
- CTCSS Encode/Decode Std
- 10 DTMF Memories
- Much Much More



C508A

Twin Band

- VHF + UHF In Your Shirt Pocket
- Compact Size
- 60 Memories
- CTCSS Encode/Decode
- Wide Band Rx + A/M Air
- 3 Scan Modes
- APO

C108 Single Band 2 Meter Available



C1208DA

- Full Feature 2 Meter
- 3 Level Output
- Wide Band
- CTCSS/Encode/Decode

Have the works in your hand & more!

NEW!

C156A

- Dot Matrix Display
- 9600 Baud Pkt
- 100 Memories
- 9 DTMF Memories
- Alpha-Numeric Memories
- CTCSS Encode
- Auto Power Off



C568A

3 Bands 2, 70cm, 23cm

- 40 Memories (200 opt.)
- Wide Band Rx
- APO
- CTCSS Encode/Decode Std
- Low Intermod
- Dual Watch



C558A

Twin Band 2/70cm

- Compact Design
- 40 Memories Std (200 opt.)
- DTMF Memories
- Wide Band Rx
- 5 Scan Modes



C228A

Twin Band 2 Meter/220 MHz

- 40 Memories
- CTCSS Encode/Decode
- Clone Mode
- Wide Band Rx
- DTMF Squelch with Paging
- & More



C288A

220 MHz

- Slim Line H.T.
- Keypad Cover
- 40 Memories (200 opt.)
- Wide Band Rx
- CTCSS Encode/Decode
- 3 Scan Modes
- DTMF Squelch with Paging



NEW

ATS-909



Yacht Boy 400

The Yacht Boy 400 provides the ultimate in digital technology to maximize receivability. Features include coverage of 150 - 350 KHz & .530 - 30 MHz with the FM band included as well. Modes include AM, FM, SSB and CW with a wide/narrow switch & 40 memories. The compact size provides great audio with dual alarms, dual clocks & a sleep timer.



Uniden



BC 9000XLT

Continuous band scanner from 25 MHz through 1.3 GHz. Fully programmable with 500 channels, 20 banks, 10 priority channels, dot matrix-alpha numeric illuminated display, auto store, VFO knob, TWIN TURBO™, scan and search.

BC 3000XLT similar to above in HT model.

YAESU



FRG-100

Table Top Rx

- 50 KHz - 30 MHz & FM
- 50 Memories
- Noise Blanker
- 10 MHz, 100 & 1 KHz Tuning Steps
- Twin Clocks
- Scan Mode

AOR
In Stock

AR8000



- All Mode - All Band
- 500 KHz - 1900 MHz
- 1000 Memories
- Band Scope
- Alpha-Numeric Comments
- Selectable Squelch
- Serial Port & Much More

Optoelectronics



Scout

Scantastic fun is yours with the frequency recordability of the Scout.

Here's another winner from Sangean with new styling, compact size and alphanumeric editing. Compare the listed features, & you'll approve of its great value. Other model available.

- 306 Memories
- 5 Tuning Methods
- USB, LSB, CW, AM, FM Modes
- Wide, Narrow Filter
- 42 World Time Zones
- 3 Timers & Much More

Sony ICF-2010



Covers 150 KHz-30 MHz and 76-108 MHz FM and 116-136 MHz AM/FM/SSB/CW. Tunes manually or by keyboard entry, automatic scanning, memory scan or 32 memory presets. LCD display, switchable IF bandwidth, fine tune. 12/24-hour clock with alarm, programmable timer and sleep timer.

Sony ICF-SW7600G



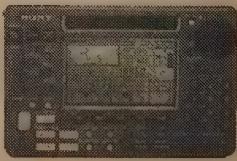
World Band Receiver covers 150 KHz-30 MHz and 76-108 MHz FM (stereo with earphones). Synchronous AM detection, SSB and FM stereo (headphones). 10-key Direct Access Tuning™ and 20 station presets, LCD display. Tone control, external antenna and record jacks, clock/timer with sleep and standby functions.

Sony ICF-SW77



Covers 150 KHz thru 30 MHz as well as the F.M. Band. Features include 100 station memories, (162) frequencies, allows stations to be selected by name and is capable of storing broadcast schedules. Programmable six-character Station Name Display, fine 50 Hz tuning resolution, FM stereo with headphones, bass and treble controls.

Sony ICF-SW55



Covers 150 KHz thru 30 MHz as well as the F.M. Band. Factory preset tuning provides access to most listened to broadcasts. Tuning methods include: preset station, direct, scan or rotary dial. 125 memories.

Call Now For Current Pricing

AEA

AEA PK-232MBX



Multi-Mode Data Controller

HF/VHF Packet • CW • RTTY • PACTOR
 AMTOR • WeFAX • NAVTEX • ASCII
 PakMail™ Mailbox With 18K Byte
 SIAM™ Signal ID and Acquisition Mode
 Eight-pole Chebyshev Bandpass Filter
 Tuning Indicator For Easy Operation
 Computer Cable Included - 25/25 Pin
 Two Radio Cables Included
 Radio Plugs Required
 Optional AC-4 Power Supply
 One Year Limited Warranty
 11"W x 8.25"D x 2.5"H

AEA DSP-232

The new DSP-232 has two software selectable radio ports for 9600 & 1200 bps VHF Packet, HF Packet, Pactor, Amtor/Sitor, CW, RTTY (ASCII & Baudot), and NAVTEX.

AEA's approach takes full advantage of the fast host processor. This gives you superior filtering, allowing you to cut through noise and receive signals.

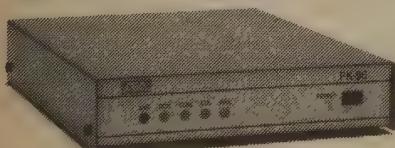
AEA PK-12



VHF Packet TNC

1200 bps VHF/UHF Packet Controller
 MailDrop Mailbox With 18K Byte
 Radio Cable Included - Radio Plug Required
 Requires Computer Cable
 Power Requirements 80 mA 13.6 VDC
 One Year Limited Warranty

AEA PK-96



High Speed Packet Controller

VHF Packet TNC
 1200/9600 bps VHF/UHF Packet Controller
 MailDrop Mailbox With 18K Byte
 Radio Cable Included - Radio Plug Required
 Requires Computer Cable
 Power Requirements 80 mA 13.6 VDC
 One Year Limited Warranty
 6.13"W x 7.4"D x 1.35"H

KANTRONICS

Kantronics KAM PLUS



Simultaneous HF & VHF Packet Or Any Mode HF & Packet VHF
 CW • RTTY • WeFAX • PACTOR
 AMTOR • NAVTEX • ASCII • G-TOR
 Personal Mailbox With Mail Waiting LED
 Tuning Indicator For Easy Operation
 HF & VHF Radio Cables Included
 Requires Radio Plugs
 RS232 25 Pin Cable Included
 AC Power Supply Optional
 One Year Limited Warranty
 6"W x 9"D x 1 3/4"H

Free Software!

Kantronics KPC3



Packet Communicator 3
 Low Power High Performance
 Personal Mailbox With Mail Waiting LED
 One Radio Cable - Radio Plug Required
 Requires Computer Cable
 Operates On Optional 9V Battery
 Optional AC Power Supply
 One Year Limited Warranty
 5.2"W x 5.2"D x 0.8"H

Kantronics KPC-9612

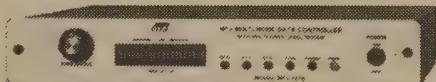


9600 & 1200 Baud At The Same Time Dual Port

Low Power High Performance
 Personal Mailbox With Mail Waiting LED
 Two Radio Cables - Radio Plugs Required
 Requires Computer Cable
 Operates On Optional 9V Battery
 Power Requirements 45 mA 6-25 VDC
 One Year Limited Warranty
 6.2"W x 6.1"D x 0.8"H

MFJ

MFJ 1278B



Packet • AMTOR • RTTY • ASCII • CW • FAX
 SSTV • PACTOR
Navtex and Contest Memory Keyer
 20 LED Precision Tuning Indicator
 Easy Mail™ Personal Mail Box
 16 Gray Level FAX/SSTV
 Automatic Signal Analysis For
 HF Packet, RTTY, ASCII & AMTOR
 Built-in Printer Port
 AC Power Supply Included
 Two Radio Cables Included
 Radio Plugs Required
 Requires Computer Cable
 One Year MFJ No Matter What Guarantee
 9 1/2" x 9 1/2" x 1 1/2"

MFJ 1270C • 1276



MFJ TNCs For VHF/HF Packet

WeFAX Mode With Starter Pack
 Easy Mail™ Personal Mail Box
 Radio Cable Included
 Radio Plug Required
 Computer Cable Required
 AC Power Supply Included
 One Year MFJ No Matter What Guarantee
 9 1/2" x 7 1/2" x 1 1/2"

MFJ 1276

All the features of the MFJ-1270C plus
 PACTOR, precision tuning indicator and
 extra 32K mailbox memory.



**MFJ 1272B
TNC/Mic Switch**

**See
Price List
For
Software
and Cables!**

R-7000

- Expandable to 80M with R-80 kit
- Reliable
- New Trap Design
- Easy Installation
- Auto Band Change
- Slim Silhouette

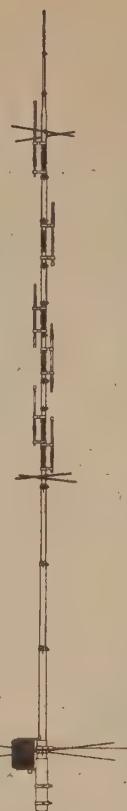
28, 24, 21, 18, 14, 10, 7 MHz
Gain, dBi - 3
Electrical Half-wave on All Bands
Power Rating - 1500 Watts PEP
Height - 24 Ft
Mast Size - 1.75-2.12"
Weight - 18 lb
Wind Load, Sq. Ft. - 2.2
Automatic Frequency Selection
Seven 49" Radials Included

R-5

28, 24, 21, 18, 14 MHz
Gain, dBi - 3
Height - 17 Ft
Mast Size - 1.5-1.75"
Automatic Frequency Selection
Four 49" Radials Included

AP-8A

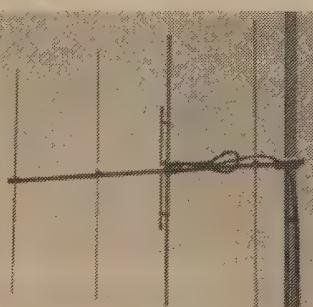
3.5, 7, 10, 14, 18, 21, 24, 28 MHz
Operates as a 1/4 Wave All Bands
Power Rating - 2000 Watts PEP
Height - 26 Ft
Mast Size - 1.5-1.75"
Weight - 9.3 lb
Wind Load, Sq. Ft. - 1.7



13B2

13 Element Wideband

144-148 MHZ • 13 Elements
Gain 15.8 dB • F/B 26 dB
2:1 Bandwidth 4 MHz • 2000 Watts PEP
Wind Load 1.8 Sq. Ft • Boom 15 Ft.
Weight - 6.7 lb



124WB

4 Element Wideband

144-148 MHZ • 4 Elements
Gain 10.2 dBd • F/B 24 dB
2:1 Bandwidth 4 MHz • 2000 Watts PEP
Wind Load .34 Sq. Ft • Boom 3 Ft.
Weight - 3 lb

AR-2 RINGO

135-160 MHZ
Gain dB 3.75
2:1 Bandwidth 10 MHz
1000 Watts FM
Wind Load .21 Sq. Ft.
Height 3.9 Ft.
Weight - 1.5 lb
Mast Size, 1"-1.25"

ARX-2B RINGO

RANGER II

135-160 MHZ
Gain dB 7.0
2:1 Bandwidth 3 MHz
1000 Watts FM
Wind Load .5 Sq. Ft.
Height 14 Ft.
Weight - 6 lb
Mast Size, 1"-1.25"

AR-270 RINGO

Dual Band

144-148 • 435-450 MHZ
Gain dB 3.7/5.5
2:1 Bandwidth 4/15 MHz
250 Watts FM
Wind Load .27 Sq. Ft.
Height 3.75 Ft.
Weight - 2 lb
Mast Size, 1.25"-2"



AR-270B RINGO ARX-270U RINGO

Dual Band

144-148 • 430-450 MHZ
Gain dB 5.5/7.5
2:1 Bandwidth 4/15 MHz
250 Watts FM
Wind Load .27 Sq. Ft.
Height 7.7 Ft.
Weight - 2.4 lb
Mast Size, 1.25"-2"



Dual Band

144-148 • 430-450 MHZ
Gain dB 9.0/12
2:1 Bandwidth 4/20 MHz
200 Watts FM
Wind Load .95 Sq. Ft.
Height 16.5 Ft.
Weight - 5 lb
Mast Size 1.25"-2"



A148-10S • 2 Meters • 10 Element

144-148 MHZ • 10 Elements
Gain 13.2 dBd • F/B 25 dB
2:1 Bandwidth 4 MHz • 1000 Watts PEP
Wind Load 1.21 Sq. Ft • Boom 12 Ft.
Weight - 6 lb • Mast Size Range 1.25"-2"



A148-3S • 2 Meters • 3 Element

144-148 MHZ • 3 Elements
Gain 7.8 dBd • F/B 25 dB
2:1 Bandwidth 5 MHz • 1000 Watts PEP
Wind Load .27 Sq. Ft • Boom 2.8 Ft.
Weight - 1.5 lb • Mast Size Range 1.25"-2"

TEN-3 • 10 Meters 3 Element Beam

28 to 29.7 MHz
Gain 8 dBd • F/B 25 dB
2:1 Bandwidth 1.5 MHz • 2000 Watts PEP
Wind Load 2 Sq. Ft. • Boom 8 Ft.
Weight - 9.9 lb

A50-3S • 6 Meters

3 Element Beam

50-54 MHz
Gain 8 dBd • F/B 20 dB
2:1 Bandwidth 1 MHz • 1000 Watts PEP
Wind Load 1.8 Sq. Ft. • Boom 6 Ft.
Weight - 7 lb

A50-5S • 6 Meters

5 Element Beam

50-54 MHz
Gain 10.5 dBd • F/B 24 dB
2:1 Bandwidth 1 MHz • 1000 Watts PEP
Wind Load 2.9 Sq. Ft. • Boom 12 Ft.
Weight - 11 lb

A3S

3 Element Beam

14, 21, 28 MHz

Gain 8 dB • F/B 25 dB
2:1 Bandwidth 500 KHz • 2000 Watts PEP
Wind Load 4.36 Sq. Ft. • Boom 14 Ft.
Weight - 27 lb

A3WS

3 Element Beam

18, 24 MHz

Gain 8 dBd • F/B 25 dB
2:1 Bandwidth 300 KHz • 2000 Watts PEP
Wind Load 4.1 Sq. Ft. • Boom 14 Ft.
Weight - 22.5 lb

NMO - The Way To Go!

LARSEN

New Open Coil Design!
Dual-Band 2M/70CM

Mag Mount - Round
NMO-MM-R, NMO-2/70BCO, W-2/70BLK

Hole Mount w/Coax
NMO-K, NMO-2/70BCO, W-2/70BLK

Trunk Lid Mount
NMO-TLM, NMO-2/70BCO, W-2/70BLK

2M 5/8 WAVE

Mag Mount - Round
NMO-MM-R, NMO-150-BCO, W-490

Hole Mount w/Coax
NMO-K, NMO-150-BCO, W-490

Trunk Lid Mount
NMO-TLM, NMO-150-BCO, W-490



| Model | NMO2/70 | NMO150 | NMO440 |
|----------------|-------------------------------|-------------|-------------|
| Bandwidth | 144-148 MHz 442-448 MHz | 144-148 MHz | 440-450 MHz |
| Gain | 2.4/4 dBd | 3 dBd | 5 dBd |
| Elec Type | 5/8 wave VHF Collinear UHF | 5/8 Wave | Collinear |
| VSWR | 1.5 to 1 | 1.5 to 1 | 1.5 to 1 |
| Power(Watts) | 200 | 200 | 200 |
| Antenna Height | 33" | 47 1/2" | 32" |
| Impedance | 50 | 50 | 50 |



KG Series

Patented on-glass antenna design featuring exclusive low impedance power transfer.

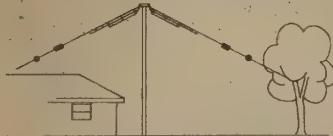
| Model | KG270PL | KG144PL | KG440N |
|----------------|-------------------------------|-------------|-------------|
| Bandwidth | 144-148 MHz 440-450 MHz | 144-148 MHz | 440-460 MHz |
| Gain | 2.4/4.5 dBd | 2.4 dBd | 2.4 dBd |
| Elec Type | 1/2 wave VHF Collinear UHF | 1/2 Wave | 1/2 Wave |
| VSWR | 1.5 to 1 | 1.5 to 1 | 1.5 to 1 |
| Power(Watts) | 50 | 50 | 50 |
| Antenna Height | 30 1/4" | 45" | 11 3/4" |
| Impedance | 50 | 50 | 50 |

14 ft. Dual Shield Low-Loss Cable. PL-259 connector shipped loose.

**See Larsen
In Price List
For
Current Specials!**

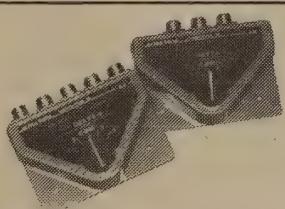


Alpha Delta



Model DX-CC • 82'
80-40-20-15-10 Meter

Model DX-DD • 82'
80-40 Meter



RF Coax Switches with
Lightning Protection!

DELTA-2 • DELTA-4

UHF Connectors • 500 MHz



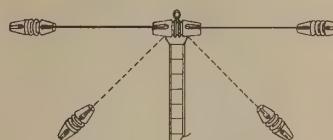
Model R-T
200 Watt thru 500 MHZ

**Lightning
Protection!**
**Transi-Trap
Surge Protectors**

A proven record of effective lightning, EMP and static protection for your valuable communications equipment.

Model LT
200 Watt thru 30 MHZ

VAN GORDEN ANTENNAS



ALLBAN

160-10M Dipole 135

Tuner Required
Multiband Ant 102' 3.5-30 MHz
Except 10 MHz

G5RV

40-10M Fan Dipole Kit

PD-4010

80-10M Fan Dipole Kit

PD-8010



HI-Q
BALUN

HIQBAL1:1

HI-Q Balun 3-40 MHz 1-to-1

HIQBAL4:1

HI-Q Balun 3-40 MHz 4-to-1

HIQANT

HI-Q Center Insulator

HIQINS

End Insulator

75COP

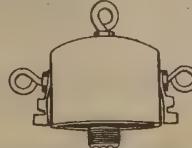
75' Copper Wire 7X22 Stranded

150COP

150' Copper Wire 7X22 Stranded

Ladder Line

450OHM 450 Ohm Ladder Line 100' Roll Vinyl Cover





DUAL-BAND
Base Antennas

- Base
- Mobile
- HT Antennas

See Price List For
More COMET Products!

GP-9

Gain & Wave:

146 MHz 8.5 dB 5/8 Wave x 3
446 MHz 11.9 dB 5/8 Wave x 8
Impedance: 50 ohms **VSWR:** 1.5:1 or less
Max Power: 200 Watts
Length: 17' 8" **Weight:** 5 lbs. 11 ozs.
Mounts to Mast Size: 1 1/4-2 1/2"
Connector: UHF

GP-3

Dual-Band 146/446 MHz
Base-Repeater Antenna

Gain:

146 MHz 4.5 dB
446 MHz 7.2 dB
Impedance: 50 ohms **VSWR:** 1.5:1 or less
Max Power: 200 Watts
Length: 5' 11" **Weight:** 2 lbs. 12 ozs.
Connector: UHF

GP-6

Dual-Band 146/446 MHz
Base-Repeater Antenna

Gain & Wave:

146 MHz 6.5 dBi 5/8 Wave x 2
446 MHz 9.0 dBi 5/8 Wave x 5
Impedance: 50 ohms **VSWR:** 1.5:1 or less
Max Power: 200 Watts
Length: 10' 2"
Connector: UHF



SBB-5/SBB-5NMO

Dual-Band 146/446 MHz
Mobile Antenna-Black

Gain & Wave:

146 MHz 3.0 dBi 1/2 Wave
446 MHz 5.5 dBi 5/8 Wave x 2
Impedance: 50 ohms
VSWR: 1.5:1 or less
Max Power: 120W FM
Length: 38"
Connector: UHF Or NMO

SBB-25/SBB-25NMO

Mono-Band 146MHz-Black
No Ground Plane Required

Gain & Wave:

146 MHz 4.1 dBi 5/8 wave
Impedance: 50 ohms
VSWR: 1.5:1 or less
Max Power: 100W FM
Length: 4' 9"
Connector: UHF Or NMO

SB-14

Tri-Band 52/146/446MHz

Gain & Wave:

52 MHz 0.0 dBi
146 MHz 3.5 dBi
446 MHz 6.0 dBi
Impedance: 50 ohms
VSWR: 1.5:1 or less
Max Power: 120W FM
Length: 4' 7"
Connector: UHF

B-10/B-10NMO Black

Dual-Band 146/446 MHz
Open coil cellular look.

Gain & Wave:

146 MHz -. - dB 1/4 Wave
446 MHz 2.15 dB 1/2 Wave

Impedance: 50 ohms

VSWR: 1.5:1 or less

Max Power: 50 Watts

Length: 12"

Connector: UHF or NMO

B-20/B-20NMO Black

Dual-Band 146/446 MHz
Open coil cellular look.

Gain & Wave:

146 MHz 2.15 dB 1/2 Wave
446 MHz 5.0 dB 5/8 Wave x 2

Impedance: 50 ohms

VSWR: 1.5:1 or less

Max Power: 50 Watts

Length: 30"

Connector: UHF or NMO

CX-224NMO

Tri-Band Mobile Antenna
146/220/446 MHz

Gain & Wave:

146 MHz 2.15 dB 1/2 Wave
220 MHz 3.6 dB 5/8 Wave

446 MHz 6.0 dB 5/8 Wave x 2

Impedance: 50 ohms

VSWR: 1.5:1 or less

Max Power: 100 Watts

Length: 36"

Connector: NMO

CHL-28J/CHL-28JNMO

Dual-Band 146/446 MHz

Mobile Antenna

Gain & Wave:

146 MHz 3.0 dBi 1/2 Wave
446 MHz 5.5 dBi 5/8 Wave x 2

Impedance: 50 ohms

VSWR: 1.5:1 or less

Max Power: 60W FM

Length: 36"

Connector: UHF Or NMO



CF-4160K DUPLEXER

146/446 MHz

Band Pass, Ins. Loss, Max Pwr:
1.3-150 MHz, 0.5 dB, 800W PEP

400-540 MHz 0.5 dB, 500W PEP

Isolation: 60 dB

Connectors: (No Coax)

Output: SO-239

Low In: PL-259 • **Hi In:** PL-259



RS-820



RS-850

MOUNTS

Requires A Coax Assembly

RS9 Trunk Lip Mount

RS-80 Gutter Mount

RS-21 Hatch/Trunk Lip Mount Adjustable
Fits Virtually Every Trunk/Hatch Back etc.

RS-820 Heavy-duty Low Profile Trunk Lip/Hatch Back
Mount. Rubber Coated Base Protects Paint

RS-850 Clamp Mount

MAG MOUNTS

MS3FVMM Hvy Duty w/4 Mtr 3.5D Coax UHF/UHF

MS5LXMM Hvy Duty w/4 Mtr 5D Coax UHF/UHF

COAX ASSEMBLIES FOR MOUNTS

Listed in Price List

HUSTLER

HF Mobile

- Masts MO-2 & MO-3 54"
- Standard Resonators 400W PEP
- Super Resonators Legal Limit
- Resonator Springs
- Quick Disconnect
- Bumper Mount
- Ball Mount
- See Price List for Details**

HF Mobile Resonators

- Standard Resonators
- Power rating 400 watts SSB

- Super Resonators
- Power rating full legal limit
- Wider bandwidth especially on 40, 75 and 80 meters

See Price List

Stainless Steel Mounts

- Exceptional performance and quality
- 180° adjustable reinforced stainless ball
- Professional quality Cyclocac bases for greatest mechanical stability
- Exclusive "C" backup plate allows external installation
- Supplied with all mounting hardware
- For Hustler and other 3/8" x 24 threads

SSM-2 Ball Mount
SSM-3 Stainless Steel Spring with Coupling Stud



FX-2 Two Meter

- 3.4 db Gain • 5/8 Wave
- 200 Watt rating
- 15' Coax with PL-259 Installed
- Mag Mount Hold to 100 MPH



RX-2 Two Meter

- 3.4 db Gain • 5/8 Wave
- 100 Watt rating
- 15' Coax with PL-259 Installed
- Mag Mount Hold to 75 MPH

RX-2

Model QD-2

Quick Disconnect

- Designed to prevent ice or dirt "freeze up"
- Machined to close tolerances
- Made of 100% stainless steel
- Convenient press-twist release
- 3/8" x 24 thread



Model BM-1

Bumper Mount

- Heavy-duty stainless steel strap fits bumpers to 18" vertical height
- Secured by two heavy "J" bolts
- 180° adjustable ball
- Standard 3/8" threads
- All hardware included



Model RSS-2

Resonator Spring

- For HF Mobile Antennas (between resonator and mast)
- Braided center pigtail to prevent detuning even at highway speeds
- Standard 3/8" threads

Model RMX-B

10M Mobile Antenna

- 2:1 VSWR - 250 to 400 KHz
- 1000 watt capacity
- Only 46 inches tall
- Requires 3/8" x 24 mount



Model UGM

Magnetic Antenna

- BNC connector and 7' mini-coax
- Convenient for handhelds
- 140-500 MHz unity gain when cut to proper length
- Extends the range of handhelds



**See
Price List
For Other
Hustler Products!**

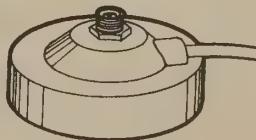
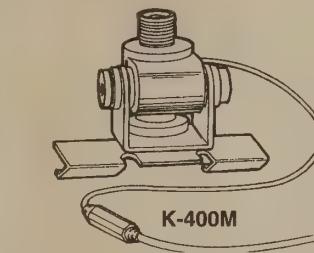
- Base Antennas
- Mobile Antennas

DIAMOND ANTENNA

- Antenna Mounts
- Coax Assemblies



Dual Band Base Station Antennas



DPSPM5D

Dual Band TriBand Mobile Antennas

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

| NR73B-NMO | NR72B-NMO | NR-770HA NR-770HNMO |
|----------------------------|------------------------------|--------------------------|
| 2M/70CM | 2M/70CM | 2M/70CM |
| 2.15 dBi 2M 5.5 dB 70CM | 2.15 dBi 2M 2.15 dBi 70CM | 3.0 dB 2M 5.5 dB 70CM |
| 100W | 100W | 200W |
| 50 ohms | 50 ohms | 50 ohms |
| Less than 1.5:1 | Less than 1.5:1 | Less than 1.5:1 |
| 34" | 14" | 41" |
| NMO | NMO | UHF or NMO |

COAX CABLE



| Loss Per 100'(MHz) | 50 | 100 | 200 | 400 | Vel% |
|--------------------|------|-----|-----|-----|------|
| C1108 RG-8X | 2.8 | 4.0 | 5.3 | 9.0 | 78 |
| C1176 RG-213 | 1.35 | 2.1 | 3.1 | 5.0 | 66 |
| C1180 RG8 Low Loss | 0.9 | 1.4 | 1.8 | 2.6 | 84 |
| C1198 RG-8 Foam | 1.2 | 1.8 | 2.6 | 3.8 | 78 |

Shield Coverage

C1108, C1198, C1176 - 95% Bare Copper Braid
C1180 - 100% Bonded Foil + 88% Tin Copper Braid

Coax Jumper Cables



**Two PL-259s
Installed!**

**Soldered Shield
And Center
Conductor!**

RG-8 • RG8X Mini 8

3 Ft • 6 Ft • 12 Ft

18 Ft • 25 Ft

50 Ft • 100 Ft

See price list for complete listing!

COAX-SEAL™

See Universal In Price List



A new space age plastic which will quickly and effectively seal all types of coax fittings of all shapes. COAX-SEAL stays flexible for years thus insuring moisture proof connections. Insures good SWR and long coax life. COAX-SEAL will allow you to quickly disconnect fittings and reseal them with same material by reforming plastic.

MFJ HT Range Extenders

Telescoping antennas for handhelds

MFJ-1714 2M Halfwave

For really long range this MFJ endfed halfwave is hard to beat. No ground plane needed. When collapsed (10 1/2") it performs like a rubber duck 40" extended.

MFJ-1712 2M/440 MHz Dual Bander

It's a 1/4 wave for 2M and a 5/8 wave with gain for 440 MHz. 7 1/4" collapsed, 19" extended.

MFJ-1710 2M 3/8 Wave

Carry this pen size antenna in your pocket like a ballpoint pen and use in the fringe and noisy area. 5 1/4" collapsed 24 1/2" extended. With pocket clip.

MFJ-1717 High Gain Dual Band 144/440 MHz "Flexible" Duck Antenna

You'll enjoy dependable QSOs with MFJ-1717. Only 15 3/4 inches in length, it's a halfwave on 440 MHz and an efficient full size 1/4 wave on 2 meters. The radiator is protected by a durable synthetic rubber compound and has a hard protective safety tip.

MFJ-1716

Similar to MFJ-1717. 8 3/4 inch length. 1/4 wave on 440 and efficient loaded 1/4 wave on 2 meters.

MFJ-1718

Add this strong, flexible "Shorty" 4 1/4 inch rubber duck to your 2 meters handheld and enjoy outstanding signals.

See MFJ In Price List!



CH-32 Miracle Baby
Hand-held Dual Band
2M/70 cm
Max. Power 10 watts

Only 1.75" Length

**High
Performance
Dual Band
Antennas**

**DIAMOND
RH-77CA**
2M/70 cm
Dual Band Antenna
15" • 50 Watt • BNC
Flexible

**COMET
SH-55**
2M/70 cm
15" • 10 Watt • BNC
Flexible

Larsen KulDuckie HT Antennas

HQ HELICAL 1/4 WAVE

VHF applications requiring peak performance in the 144-148 MHz while tolerating a length slightly longer than helical types.

KD4-146-HQ Blue Tip

All 2M HTs • 10" Approx. • BNC

2/70 DUAL BAND

Superb performance. Operates as a full 1/4 wave at 440 MHz and a loaded 1/4 wave at 144-148 MHz

KD4-270

All Dual Band HTs • 7 1/2" Approx. • BNC





MFJ ANTENNAS

See Price List For MFJ Products

Super Hi-Q Loop Antenna

MFJ-1786

... 36 inch diameter -- it's the smallest, high efficiency 10-30 MHz continuous coverage antenna ever made for ham radio ...

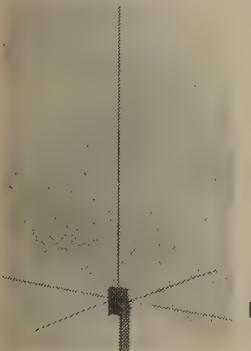
- Automatic Band Selection, SWR/Wattmeter
- Round conductor more efficient than flat strip
- Welded butterfly capacitor, no rotating contacts
- All welded construction
- No control cable needed

Super Remote Control makes MFJ's Super HiQ Loop extra easy-to-tune

Dual fast & slow tune buttons
Built-in SWR/Wattmeter
Cross-Needle
No control cable needed

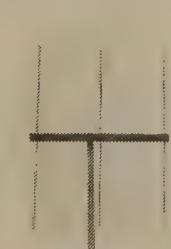


Included With 1786



MFJ-1750
2 Meter

5/8 Wave Ground Plane
Easy U-bolt (included)
Installation to any 1" to
1 1/2" Mast

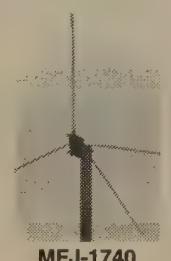


MFJ-1763
Portable 3 Element
For 2 Meters
Boom - 30 1/2"
Wt - 2 lbs.

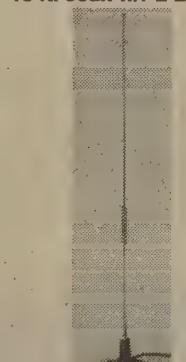


MFJ-1724B
144 And 440 MHz
Mag Mount 19"
15 ft. coax w/PL-259

5/8 Wave
2M Mag Mount
12 ft. coax with PL-259



MFJ-1740
2M 1/4 Wave



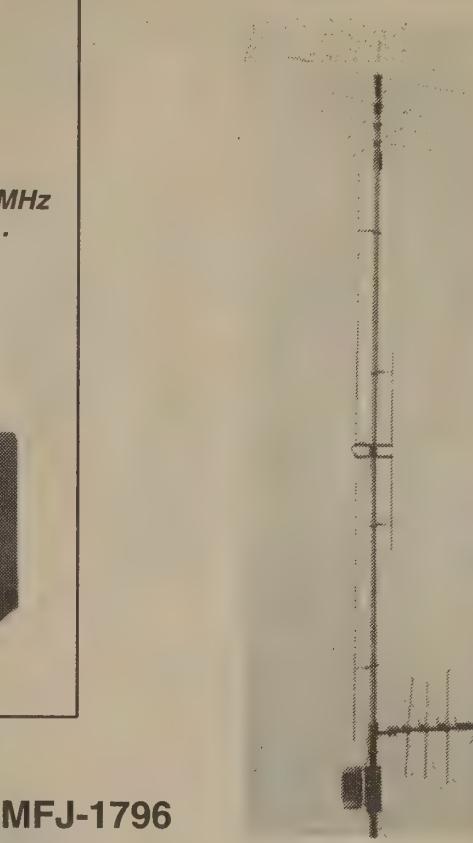
MFJ-1729
Super*Gain™
144/440 MHz
2.6/6.3 dB
Mag Mount 29 3/4"
12 ft. coax w/PL-259
Free BNC adapter

MFJ-1728
5/8 Wave
2M Mag Mount
12 ft. coax with PL-259



MFJ-1730
Pocket Roll-Up
2 Meter Halfwave

**MFJ halfwave
vertical Antenna**
MFJ-1796



MFJ-1796

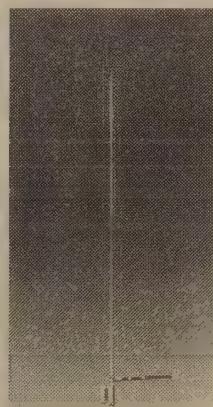
6 bands: 40, 20, 15, 10, 6, 2 Meters No radials or ground needed!

Operate 40, 20, 15, 10, 6, 2 meters with this MFJ-1796 ground independent halfwave vertical antenna--no radials or ground ever needed! It's only 12 feet high and has a tiny 24 inch footprint.

You can mount it anywhere from ground level to the top of a tower--on apartments, condos, small lots, even on a motorhome.

You can take it anywhere--vacations, field day, DX-expedition, camping, nearly anywhere you go.

Frequency selection is fully automatic--there are no moving parts, nothing to adjust--all you do is transmit. It handles up to 1500 watts PEP. No radials or ground ever needed!



MFJ-1798

Full sized performance . . .

No ground or radials

Operates 10 bands:

**75/80, 40, 30, 20, 17, 15, 12,
10, 6 and 2 meters**

- Operates 10 bands
- Full size performance
- Separate full size radiators
- End loading - most efficient
- MFJ *Elevated Top Feed*
- Low angle of radiation
- Built to last & easy to tune
- No feedline radiation
- Self supporting and 20 ft. tall

OUTbacker

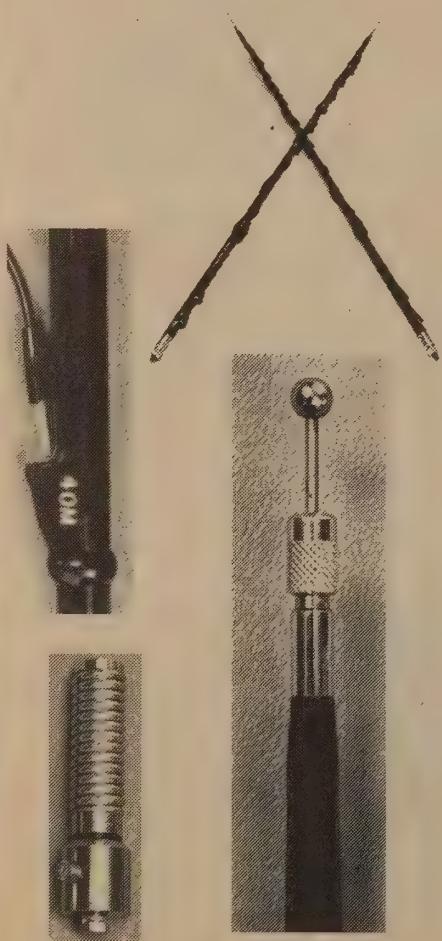
All Bands Including WARC Bands
In One Neat Built-To-Last Antenna

- One Antenna Does It All
- Low SWR • Wide Bandwidth
- Built To Last
- Sheer Mobiling Enjoyment

It's plug-n-play, mate!

OUTBACKER
*links your rig
to the world.*

OUTBACKER Perth
7.5 ft. tall
80-10m plus WARCs
150 watt PEP • 3/8-24 thread
Perfect for trunk mounting
Low wind resistance
Superb performance



DX A-Plenty • Low SWR

TIMEWAVE
TECHNOLOGY INC.

A Quantum Leap Ahead! **TIMEWAVE DSP-599zx** New All-mode DSP Noise Filter Nothing Else Even Compares.

The DSP-599zx combines **hyperspeed DSP processor** with an alphanumeric display, quick-select pushbuttons and optical encoders to wipe out noise and QRM like never before! Heterodynes disappear like magic; weak signals pop up from the noise, and the razor-sharp filters slice away QRM. The **DSP RTTY remodulator** pulls out solid copy when you can barely hear a signal. **Continuous filter tuning to 5.4 kHz** opens up the wider bandwidth modes like shortwave AM broadcast and VHF/UHF and sophisticated data modes. The DSP-599zx unique design is **field upgradeable**.

- Enhances voice, data and CW
- Remodulates RTTY
- Wideband for AM and FM
- Continuous Coverage
- Two selectable inputs
- Hyperspeed DSP - 27 ns. fast!
- LCD alphanumeric display
- Front panel programming
- Visible Memories - instant recall
- 80 KB RAM on the DSP chip

The TW DSP-9+ and DSP-59+ improve reception by simultaneously reducing random noise up to 20 dB and heterodynes up to 50dB. TW DSP filters feature third generation 16 bit processing, providing razor sharp audio for SSB, CW and Data modes. Both have AGC for wider dynamic range and signal boosting/peaking, relay bypass and self test modes. A station requirement for weak signal, noisy band operation during the **LOW SUN SPOT CYCLE**!



DSP-59+
Multi-Mode Filter

Now hundreds of CW and Bandpass filters allow the operator to select almost any filter combination. The easy turning filter knobs allow continuous coverage. Includes all data filters in the DSP-9+ plus G-TOR, SSTV, EME, and WEFAK. Voice filters cover 200Hz to 3.4 kHz. 13 CW center frequencies, CW bandwidths from 25Hz to 600Hz and a CW marker to spot the center of narrow filters.

DSP-9+
Multi-Mode Filter



Push button selectable bandpass and automatic notch filters. SSB filters 1.6, 2.0, 2.4kHz, CW 100, 200 and 500 Hz. Programmable CW center frequencies 400/500/600/800Hz. HF data filters, HF Packet, PACTOR, G-TOR, AMTOR, AM and RTTY with programmable center frequencies for North America and Europe.

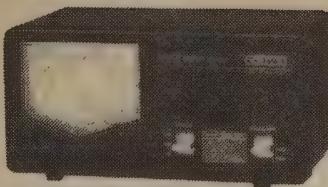


DSP-9
Multi-Mode Filter

Designed for the ham who wants CW and SSB, the easy-to-operate TW DSP-9 features selectable switching among 1.8, 2.4 and 3.1 kHz SSB filters, and between 100, 200 and 500 Hz CW filters.

DAIWA

SWR Power Meters



| MODEL | NS-660PA* | NS-663BM |
|-----------------|----------------------|-------------|
| Frequency | 1.8-150 MHz | 140-525 MHz |
| Forward Power | 30/300/3 KW | 30/300 W |
| Tolerance | ±10% at full scale | |
| SWR Sensitivity | 8 W | .8 W |
| Impedance | 50 Ω | |
| Connectors | UHF | |
| Dimensions | 184W x 95H x 152D mm | |

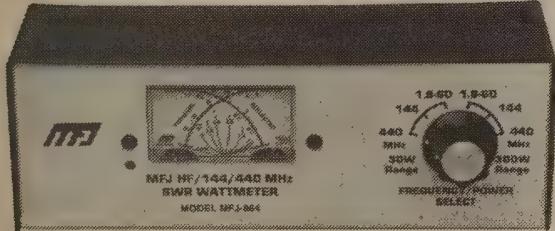
*Peak Reading ±1.5% at full scale

| MODEL | CN-101 | CN-103 |
|-----------------|---------------------|-------------|
| Frequency | 1.8-150 MHz | 140-525 MHz |
| Forward Power | 15/150/1.5 KW | 20/200 W |
| Tolerance | ±10% of full scale | |
| SWR Sensitivity | 4W | |
| Impedance | 50 Ω | |
| Connectors | UHF | |
| Dimensions | 155W x 80H x 100 mm | |

| MODEL | CN-410M | CN-460M |
|-----------------|---------------------|-------------|
| Frequency | 3.5-150 MHz | 140-450 MHz |
| Forward Power | 15/150 W | 15/150 w |
| Tolerance | Better than ±15% | |
| SWR Sensitivity | 3W | |
| Impedance | 50 Ω | |
| Connectors | UHF | |
| Dimensions | 71W x 78H x 100D mm | |

MFJ-864 HF/VHF/UHF

1.8-60 MHz, 144 MHz, 440 MHz



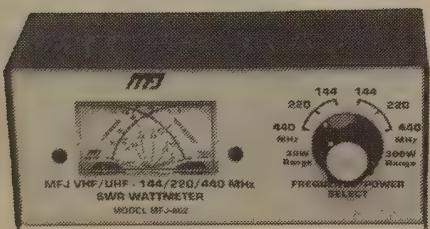
This new MFJ Cross-Needle SWR/Wattmeter covers HF thru HF -- 1.8 to 60 MHz, 144 MHz, 440 MHz bands. You can read forward and reflected power and SWR simultaneously at a single glance.

It features separate HF and VHF/UHF directional couplers, each with its own set of SO-239 coax connectors.

Power ranges -- 30/300 watts forward and 6/60 watts reflected. Each power range for each band is individually calibrated.

7 1/4 x 2 1/2 x 2 1/4 inches

MFJ-862 144/220/440 MHz



Similar to MFJ-864 but covers 144 MHz, 220 MHz and 440 MHz. 30/300 watts forward, 6/60 watts reflected ranges.

5 3/4 x 2 1/2 x 2 1/4 inches

MFJ-860 1.8 to 60 MHz

Similar to MFJ-862 but covers 1.8-60 MHz.. 30/300 watts forward, 6/60 watts reflected ranges.

4 1/2 x 2 1/4 x 3 inches

MFJ SWR/Power Meters



MFJ 815B 1.8-30 MHz SWR/Wattmeter

1.8-30 MHz • 2000 Watt
Cross Needle Meter • Peak or Average
2000/200 Forward • 500/50 Reflected
7 1/4"W X 4 1/2"H X 3 1/2"D

MFJ 817 144/440 MHz SWR/Wattmeter



MFJ 812B

144/220 MHz VHF SWR/Wattmeter

144-220 MHz • 300 Watt
300/30 Forward and Reflected
4 1/2"W X 2 1/4"H X 3"D

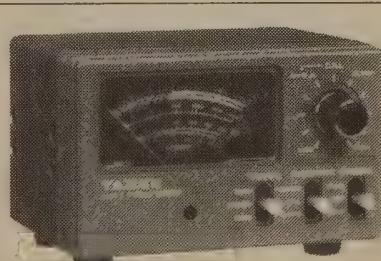
MFJ 816

1.8-30 MHz SWR/Wattmeter

1.8-30 MHz • 300 Watt
300/30 Forward and Reflected
4 1/2"W X 2 1/4"H X 3"D



See price list
for complete listing
of MFJ products!



YAESU YS-500 SWR/Power Meter

140-525 MHz • 4W/20W/200W
Average And Peak Power
SO-239 Connectors

4 3/4W x 2 3/4H x 3 1/2D in.

**See price list or call for
complete listing of MFJ products!**

MFJ

Order Now!

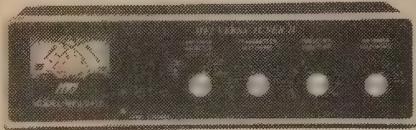
**Deluxe 300 Watt Tuner
with Built-In Dummy Load**



MFJ 949E

1.8 to 30 MHz • Cross Needle Meter
4:1 Balun for Balanced Lines
Peak Or Average Reading Meter
Direct or Thru Tuner
Built-in 300 Watt Dummy Load
Coax Switch Selects 2 Coax Lines
10" W X 3" H X 7" D

**Super Value
Versa Tuner II**



MFJ 941E

1.8 to 30 MHz • Cross Needle Meter
300/50 and 30/5 Watt Ranges
Lighted Meter Requires 12 Volts
4:1 Balun for Balanced Lines
Coax Switch Selects 2 Coax Lines
Direct or Thru Tuner
10 5/8" W X 2 7/8" H X 7" D

**MFJ Compact
Random Wire Tuner**



MFJ 16010

Operates all bands 1.8-30 MHz anywhere
with any transceiver using a random wire
and an antenna tuner small enough to
carry in your hip pocket.
Handles up to 200 watts output.
Has SO-239 connectors.
2" W X 3" H X 2" D

MFJ's Smallest Versa Tuner



MFJ 901B

1.8 to 30 MHz • 200 Watt PEP
4:1 Balun For Balanced Lines
Matches dipoles, vees, random wires,
verticals, mobile whips, beams,
balanced and coax lines.
5" W X 2 1/2" H X 6" D

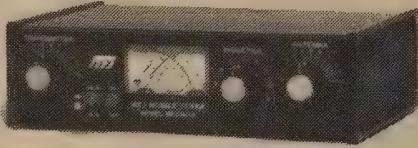
Deluxe 300 Watt Tuner



MFJ 948

1.8 to 30 MHz • Cross Needle Meter
4:1 Balun For Balanced Lines
Peak Or Average Reading Meter
Coax Switch Selects 2 Coax Lines
Direct or Thru Tuner
10" W X 3" H X 7" D

**Compact Mobile
HF Antenna Tuner**



MFJ 945D

1.8 to 30 MHz • Cross Needle SWR Meter
Forward & Reflected Power
300/50 & 30/5 Watts
Lighted Meter Requires 12 Volts
8" W X 2" H X 6" D

**MFJ 3 KW
Roller Inductor Tuner**



MFJ 986

1.8 to 30 MHz • Cross Needle Meter
Roller Inductor with Three Digit Counter
4:1 Current Balun For Balanced Lines
Peak Or Average Reading Meter
Direct or Thru Tuner
Coax Switch Selects 2 Coax Lines
10 1/4" W X 4 1/2" H X 15" D

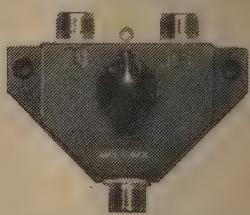
**MFJ's world famous
3 KW Versa Tuner V**



MFJ 989C

1.8 to 30 MHz • Cross Needle Meter
Roller Inductor with Three Digit Counter
Built-in 300 Watt Dummy Load
4:1 Current Balun For Balanced Lines
Peak Or Average Reading Meter
Coax Switch Selects 2 Coax Lines
Direct or Thru Tuner
Balanced or Random Wire
10 3/4" W X 4 1/3" H X 15" D

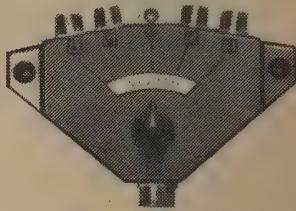
**Heavy Duty
Coax Switch**



MFJ-1702B

Two Position Coax Switch
Center Ground Position
2.5 KW PEP • 1 KW CW
60 dB Isolation At 300 MHz
Less Than 0.2 dB Insertion Loss
SWR Below 1.2:1 • Mounting Holes
SO-239 Connectors • 3" x 2" x 2"

**Heavy Duty Coax Switch
With Surge Protection!**



MFJ 1704

Four Position Coax Switch
Center Ground Position
Lightning Surge Protection Device
2.5 KW PEP • 1 KW CW
Extremely Low SWR
50 dB Isolation At 500 MHz
Negligible Insertion Loss • SO-239 Conn

HF Antenna Switch



MFJ 1701

Six Position Coax Switch
Unused Terminals Grounded
1.8-30MHz • 50-75 Ohm
2 KW PEP • 1 KW CW
SO-239 Connectors



**MFJ
W9INN
Balun Box**

MFJ 912

Let's you use coax from your antenna tuner
to the MFJ-912 mounted outside the
building. The MFJ-912 then converts the
unbalanced coax to the balanced
transmission line (ladder line).
Giant 2 core balun wound with teflon.
3 1/4 x 2 1/4 x 7 inches

See price list or call for
complete listing of MFJ products!

MFJ



MFJ-249
1.8-170 MHz

The MFJ-249 has all the features of MFJ-259 but less the RF resistance meter. Includes 1.8-170 MHz continuous coverage, 10 digit LCD frequency counter and smooth vernier tuning. It's fully portable.
4" x 2 1/2" x 6 3/4"



**HF/VHF
SWR
Analyzers**

10-digit LCD Frequency counter
SWR 1.8-170 MHz

MFJ-259

1.8-170 MHz

The MFJ-259 gives you a complete picture of your antenna's performance anywhere between 1.8 and 170 MHz -- you can even check SWR outside of the ham bands without violating FCC rules. Set the bandswitch and tune the dial. SWR is displayed instantly!

Now you can measure RF resistance up to 500 ohms at minimum SWR--instantly--on MFJ's exclusive side-by-side RF resistance and SWR meters.

Take the guesswork out of building matching networks and baluns for your antennas.

Watch the effects of spacing on radiation resistance as you adjust your antenna.

4" x 2 1/2" x 6 3/4"

MFJ 24 Hour Wall Clock



MFJ-105B

The MFJ-105B is a true 24 hour quartz wall clock. The huge 10 inch diameter face gives excellent visibility across a computer or radio room. A single "AA" battery (not included) provides over one year operation.

MFJ Multiple DC Power Outlets



MFJ-1118

The MFJ-1118 is MFJ's most versatile and highest current Deluxe Multiple DC Power Outlet. It lets you power two HF and/or VHF transceivers and six or more accessories from your transceiver's main 12 VDC power supply. Two pair of 30 amp 5-way binding post that handle a total of 35 amps. Six pairs of 5-way binding posts that handle a total of 15 amps. Six feet of eight gauge color coded wire. Built-in 0-25 VDC monitor meter and on-off switch
12 1/2" X 2 3/4" X 2 1/2"



MFJ-1116

MFJ-1116 Deluxe Multiple DC Power Outlet gives you 8 DC outlets for powering your accessories. Hooks to your rig's main 12VDC power supply. You can monitor DC Voltage on its built-in voltmeter. Has power switch and 15 amp fuse.
12 1/2" X 2 3/4" X 2 1/2"



MFJ-1112

Like the MFJ-1116 but without ON/OFF switch, voltmeter and fuse.
It has 6 pair of outlets.
12 1/2" X 2 3/4" X 2 1/2"

MFJ 12/24 Hour Clocks



MFJ-74 24 HOUR LCD CLOCK



MFJ-107B • 108B

Read both UTC and local time at a glance with the MFJ-108B dual clock that displays 24 and 12 hour time or choose the MFJ-107B single clock that shows 24 hour UTC time. Brushed aluminum frame.

UHF/VHF/HF Dummy Load

MFJ-264

Versatile dummy load lets you tune up to 650 MHz and get extremely low SWR. You can run 100 watts continuously, 1500 watts for 10 seconds.
3" W X 3"H X 7"D



Dry 300W HF Dummy Load

MFJ-260B

Air cooled, non-inductive resistor in perforated metal housing with SO-239 connectors. Full load for 30 seconds, derating curve to 5 minutes.
2 1/4" W X 2 1/4" H X 7"D

1 KW Dummy Load



MFJ-250

MFJ-250 dummy load lets you tune up fast! Run 1-KW or 2 KW PEP for 10 minutes. 1/2 KW CW or 1 KW PEP for 20 minutes. Continuous duty with 200 watts CW or 400 watts PEP.

Transformer oil included. Ideal for testing HF and VHF rigs. SO-239 connector. Vented for safety. Carrying handle.
7 1/2" high by 6 5/8" diameter

Package
of 4

Eliminates
RFI

MFJ-701

RFI-Free Choke Kit makes it easy to eliminate common RFI problems. You simply wind the offending cable around MFJ's RFI suppressing toroid to get rid of RFI. Each toroid separates into halves to make it easy to wind on all kinds of cable, including computer ribbon, TV coax, power cord, telephone wire, video/stereo cables.



TELEX/Hy-Gain Rotors



YAESU ANTENNA ROTATORS

G-450XL

Light to medium duty.
Low price, perfect entry level rotator.

| | |
|-------------------------|--------------|
| 360° Rotation Time: | 51 sec. |
| Rotation Torque: | 39.8 ft-lbs |
| Stationery Torque: | 217 ft-lbs |
| Max. Vertical Load: | 242 lbs |
| Wind Load: | 10.6 sq ft |
| Mast Diameter: | 1 3/4 - 2 in |
| Max. Turn Radius x Wt.: | 722 ft-lbs |

G-800SDX

Medium-duty for medium/large HF arrays.
Includes variable speed and preset controls.

| | |
|-------------------------|-----------------------------|
| 360° Rotation Time: | (S) 55 sec, (SDX) 43-93 sec |
| Rotation Torque: | 43-79 ft-lbs |
| Stationery Torque: | 288 ft-lbs |
| Max. Vertical Load: | 1760 lbs |
| Wind Load: | 21 sq ft |
| Mast Diameter: | 1 1/2 - 2 1/2 in |
| Max. Turn Radius x Wt.: | 1299 ft-lbs |

User selectable
North or South
center

G-1000SDX

Medium/heavy-duty for large HF arrays.

| | |
|-------------------------|------------------|
| 360° Rotation Time: | 43-93 sec |
| Rotation Torque: | 43-79 ft-lbs |
| Stationery Torque: | 433 ft-lbs |
| Max. Vertical Load: | 1760 lbs |
| Wind Load: | 23 sq ft |
| Mast Diameter: | 1 1/2 - 2 1/2 in |
| Max. Turn Radius x Wt.: | 2020 ft-lbs |

G-5400B

Azimuth-Elevation rotator combination.

| | | | |
|-------------------------|------------|---------------------|------------------|
| 180° El. Rotation Time: | 58 sec | Max. Vertical Load: | 440 lbs |
| 360° Az. Rotation Time: | 52 sec | Wind Load: | 11 sq ft |
| El. Rotation Torque: | 101 ft-lbs | Mast Diameter: | 1 1/2 - 2 1/2 in |
| Az. Rotation Torque: | 44 ft-lbs | Boom Diameter: | 1 1/4 - 1 5/8 in |
| El. Stationery Torque: | 289 ft-lbs | Pointing Accuracy: | + or - 4% |
| Az. Stationery Torque: | 145 ft-lbs | | |

BENCHER LOW PASS FILTER



YA-1

Specifications:

Working Range: 1.8 to 29.7 MHz

Impedance: 50 ohms

Power Rating: 1.5 kw cont.

5 kw peak

Attenuation: ≥80db @ 54 MHz

Size

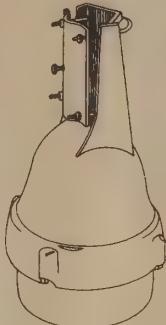
2 1/2(W) x 9 1/8(L)x2 1/2(H)

When dealing with television interference problems, installation of a good low pass filter is ALWAYS the first step the amateur should take. And often, a good quality low pass filter at the output of your transceiver is the only step needed to resolve your dilemma.

Take the first step towards becoming active again, even during prime time! Put a Bencher YA-1 in your transmission line, and enjoy the bands again!

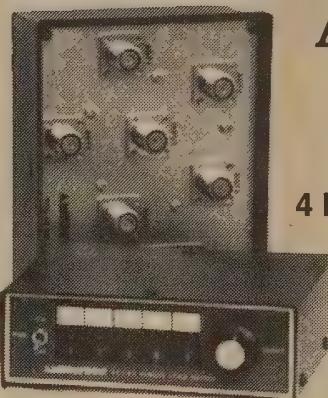
Ham-IV

- Antennas Up to 15 sq. ft.
- Electric Locking Steel Wedge
- Dual 98 Ball Bearing Race
- Illuminated Directional Indicator
- Low Voltage Control
- Zener Regulated Meter Circuit
- Machined Steel Ring Drive Gear
- Maximum Mast Size 2 1/16"



T2X

- Antennas Up to 20 sq. ft.
- Electric Locking Steel Wedge
- 138 Ball Bearings
- Illuminated Directional Indicator
- Low Voltage Control
- Zener Regulated Meter Circuit
- Machined Steel Ring Drive Gear
- Maximum Mast Size 2 1/16"



AMERITRON REMOTE COAX SWITCHES

RCS-4

4 POSITION HF SWITCH

Similar to RCS-8V.

HF only

Handles 2500 watts PEP
Requires No Control Cable.

RCS-8V

COAX SWITCH

DC to UHF • 5 KW

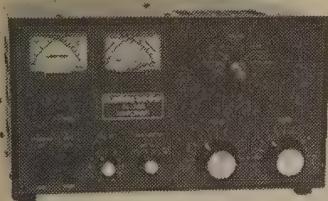
Replace 5 coax feedlines with one with this Ameritron Coax switch. Weatherproof box mounts outdoors on your tower or mast. Attractive control unit sits on your operating desk. Low SWR to 450 MHz. Low loss. Rated at 5 KW to 30 MHz, 1 KW at 15- MHz. Requires 5 wire control cable.



MFJ Low Pass Filter

If your harmonics are causing TVI problems, an MFJ-704 could keep your neighbors happy while you have fun hamming. The MFJ-704 Super Lowpass Filter simply plugs between your rig and antenna. It suppresses TVI, RFI, telephone and other interference by reducing unwanted harmonics going to your antenna. Handles full legal power from 1.8-30 MHz. Attenuates above 40 MHz. 3 x 3 x 9 inches.

AL-80B kilowatt output desktop linear can double your average SSB power output with high-level RF processing. It also runs cooler because its Eimac 3-500Z tube completely turns off between words.



Ameritron AL-80B

1000 watts SSB • 850 watts CW
Heavy duty power supply
160 thru 15 meters
8.5" H x 14" x 15.25" W

Ameritron no tune Solid State FET Amplifier

No tuning, no fuss, no worries – just turn on and operate. Incredibly low price includes AC power supply, 600 watts output, continuous 1.5-22 MHz coverage, instant bandswitching, no warm up, no tubes to baby, fully SWR protected, extremely quiet, very compact.

Ameritron ALS-600

Includes ALS-600PS
Heavy Duty Power Supply



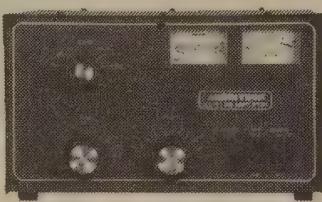
6" x 9.5" x 12"

Ameritron

A tough low cost linear with REAL transmitting tubes!

Ameritron AL-811 • AL-811H

Ameritron's AL-811 linear amplifier gives you plenty of power to bust thru QRM. You get a quiet desk top linear that's so compact it'll slide right into your operating position.



You get three tough vertically mounted 811A transmitting tubes, extra heavy duty power supply, all HF band coverage, pressurized ventilation, tuned input, dual illuminated meters, adjustable ALC and much more.

AL-811 3 tubes 600 watt out
AL-811H 4 tubes 800 watt out

Ameritron Mobile no tune Solid State FET Amplifier



Ameritron ALS-500M

Ideal mobile amplifier. Uses 13.8 VDC mobile electrical system, very compact 3.5 x 9 x 15 inches, extremely quiet, 500 watts output, continuous 1.5-22 MHz coverage, instant bandswitching, no tuning, no warm up, SWR protected.

For the unusual gift . . .

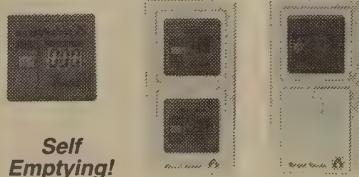
Great for birthdays, Christmas, etc.

RainWise Rain Gauge

Remote Reading Rain Gauge! • 1/100" Read Out



New! Wireless Model



Accumulation Counter
Available on Some Models!

- Large 8" collector area
- Indicator Stays Inside to Keep You Dry
- 30 Feet Wire Included
- Meets NWS Specifications
- Counters Have 1 Year Warranty

- Empties Automatically
- Battery Included on Some Models
- Digital Read-out
- Lifetime Gauge Warranty
- Self Emptying

| Model | MSRP | Sale |
|--|--------|--------|
| Rainew 100 30' Wire Included With Accumulation Counter | 69.95 | 64.95 |
| Rainew Wireless -Up to 100' With Accumulation Counter | 119.95 | 109.95 |
| | 99.95 | 94.95 |
| | 149.95 | 139.95 |

| Model | MSRP | Sale |
|--|--------|--------|
| Rainew 100 30' Wire Included With Accumulation Counter | 69.95 | 64.95 |
| Rainew Wireless -Up to 100' With Accumulation Counter | 119.95 | 109.95 |
| | 99.95 | 94.95 |
| | 149.95 | 139.95 |

POWER POCKET

- 12V/2.0 Amp Hour
- Maintenance Free
- Rechargeable
- Belt Loop On Soft Bag
- Shoulder Strap
- Light-weight

Dependable power has never been easier or more convenient. Simply plug your radio in the POWER POCKET's cigar lighter plug and you have hours of extended talk time.



- Wall Charger Included • Charges in 6-8 hours
- 3.5" x 1" x 6.5" • 30 ozs.

See Power Pocket In Price List!

Battery Power Packs for Your Handheld

MAHA • Periphex

W & W Associates

We offer a wide variety of after-market batteries for your needs!

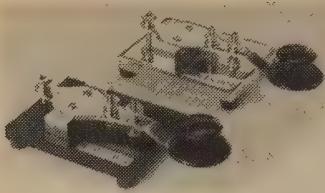


Call Now For Monthly Specials!

BENCHER

We Make CW Fun Again!

We didn't invent CW,
we perfected it!



RJ-1 Hand Key

- Individual locking adjustments for arm height, tension and contact spring
- Non-skid Feet
- Oil impregnated pivot bearings
- Solid steel base comes in black or chrome finish



BY-1 Black BY-2 Chrome

- Stainless Steel Adjustable Spring for Different Fists
- Non-skid Feet
- Unmatched Responsiveness
- Nylon & Stainless Self Adjusting Needle Bearings

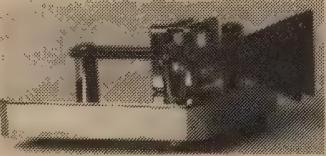


ST-1
Single Lever



AMECO K-4 Telegraph Key

High quality key with a polished brass base and 1/8" silver contacts. The contact spacing and tension are easily adjusted. Smooth keying is assured by adjustable ball bearings.



MFJ-564

MFJ Deluxe Iambic Paddles features a full range of adjustments in tension and contact spacing, self-adjusting nylon and steel needle bearings, contact points that almost never need cleaning, precision machined frame and non-skid feet on heavy chrome base.



MFJ-451

MFJ Dedicated CW Keyboard

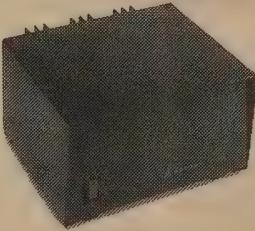
The MFJ-451 includes IBM-AT compatible keyboard, a 200 character type-ahead buffer and two 100 character nonvolatile message memories. You can key nearly any modern solid state transmitter and can vary speed from 5 to 100 wpm.

Use 12 VDC or 110 VAC with MFJ-1312B

ASTRON Power Supplies

ICS-Intermittent Communication Service
50% Duty Cycle - 5 min. on • 5 min. off

13.8 Volts DC
Crowbar Over Voltage Protection



| RS-A SERIES | Continuous Duty Amps | ICS* Amps | Size (In) H x W x D | Wt. (lbs.) |
|----------------|-------------------------|--------------|------------------------|------------|
| RS-7A | 5 | 7 | 3 3/4 x 6 1/2 x 9 | 9 |
| RS-12A | 9 | 12 | 4 1/2 x 8 x 9 | 13 |
| RS-20A | 16 | 20 | 5 x 9 x 10 1/2 | 18 |
| RS-35A | 25 | 35 | 5 x 11 x 11 | 27 |

RS-M SERIES WITH DUAL METERS

| | | | | |
|--------|----|----|-----------------|----|
| RS-20M | 16 | 20 | 5 x 9 x 10 1/2 | 18 |
| RS-35M | 25 | 35 | 5 x 11 x 11 | 27 |
| RS-50M | 37 | 50 | 6 x 13-3/4 x 11 | 46 |

VS-M SERIES WITH DUAL METERS

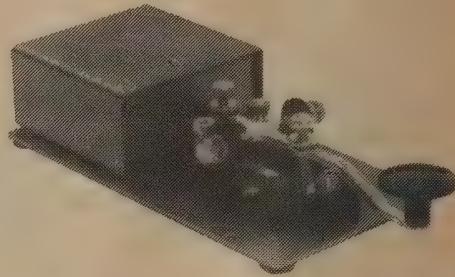
| | | | | | |
|--------|----------|-----------|----|-------------|----|
| VS-35M | 25@ 13.8 | 15@ 10VDC | 35 | 5 x 11 x 11 | 29 |
|--------|----------|-----------|----|-------------|----|

NYE VIKING



MASTER KEY 330-001

The perfect straight key. Complete with cord and plug-ready to use! Isolated contact assembly separates keying circuits from hardware. Includes gold-plated silver contacts, adjustable key arm, Navy knob and heavy die-cast base.



CODE PRACTICE SET 404-002

Perfect for beginner! Uses NYE Viking Standard Key (Model No. 310-001), oscillator and amplifier, built-in 2" speaker-all mounted on a base with non-skid feet. Gives chirp free keying. Key is ideal for re-use with any transmitter.



Model 310-001

Transmitting Keys & Accessories

| | |
|---------|--|
| 310-001 | Black Oval Base w/Nickel Plated Hdwe |
| 315-001 | Brass Plated Oval Key-Painted Steel Base |
| 320-001 | Blk Rectangular Base-Nickel Plated Hdwe |
| 322-001 | As above except brass hardware |
| 300-002 | Hvy Steel Base w/Non-Skid feet |

MFJ-557 Code Practice Oscillator



Morse Straight Key On Heavy Steel Base
Volume And Tone Control • Adjustable Contacts
Earphone And External Speaker Jack
Requires 9V Battery Or MFJ-1305 Adaptor

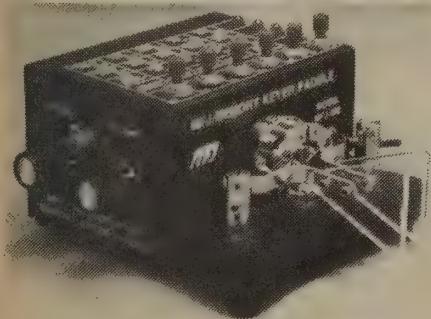
MFJ Keyers, Memory Keyers and Code Tutor



MFJ 422B

MFJ, Bencher and Curtis team up to bring you America's most popular keyer in a compact package for smooth easy CW. It gives you the proven Curtis 8044 ABM IC, is adjustable in weight and tone and has front panel volume and speed controls (8-50 WPM) and dot-dash memories.

Includes Bencher BY-1 (Black)
4 1/8" W X 2 5/8" H X 5 1/2" D



Menu Driven Memory Keyer Bencher Paddle Combo

MFJ-490

The best of all CW worlds -- nearly all the features of the MFJ-492 Menu-Driven Memory Keyer in a compact configuration that fits right on the Bencher iambic paddle!

You get message memories, Morse trainer, sidetone, automatic serial numbering -- plus more. Uses 9 volt battery, 12 VDC or 110 VAC with MFJ-1312B AC adapter. 5 x 3 x 5 1/2 in

MFJ Menu Driven Memory Keyer

MFJ-492

MFJ's new Menu Driven Memory Keyer lets you immediately enjoy your MFJ-492 without reading an instruction manual -- there's no keypad, no complex sequences, nothing to remember.

You simply select a menu by pressing a button. An LED lights to show you which menu is active. You select a feature by pressing a feature button. It's as easy as using a computer touch screen! Each menu is clearly printed on the front panel -- there's no confusion.

- Save and play messages
- Set speed, weight, sidetone
- Enter iambic, semi-auto, handkey message queue command modes
- Powerful Morse Code Trainer
- Instant-replay a random session
- Store custom code practice sessions in memory

MFJ Personal Morse Code Tutor

Learn Morse code anywhere with personal pocket size Morse Code Tutor

MFJ-411

Learn Morse code anywhere with this pocket size MFJ Personal Morse Code Tutor.

When you have a spare moment, no matter where you are, you can enjoy a code practice session ... at home, going to work, in a hotel, on vacation, on a plane, car, train, bus or just waiting.

Beginner's Course Mode This pocket size tutor takes you from zero code speed with a beginner's course to Extra Class with customized code practice.

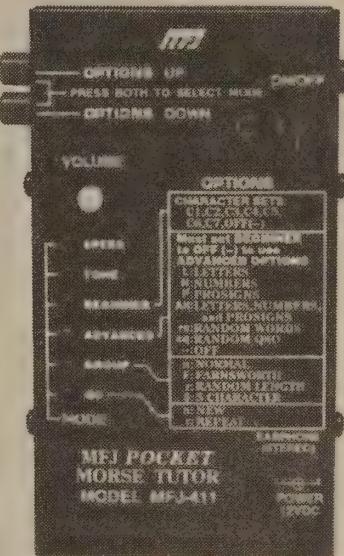
A Random QSO Mode lets you practice copying plain English QSOs to get you ready for your FCC code exam.

Customized Practice You can customized a practice session by selecting letters, numbers, 5 character groups or random 1 to 8 character groups. You can vary speed from 5 to 50 words per minute.

Realistic Plain English QSOs You can practice copying realistic on-the-air style plain English QSOs.

Word Recognition Mode It give you hundreds of commonly used words in amateur radio for you to practice recognizing entire words instead of individual letters.

- Easy-to-Use Menu
- Pocket Size
- 3 x 1 1/8 x 5 1/2 in.
- Uses a 9V Battery (Not Included)
- Or MFJ-1312B AC Adapter



MFJ 401B

Proven Curtis 8044ABM IC Keyer Chip Send iambic, automatic, semi-automatic or manual with your squeeze or straight key

Dot-Dash Memories • Volume Control

Self Completing dots and dashes

Speed Control 8- 50 WPM

Requires 9V Batt or MFJ-1305

4" x 2" x 3.5"



See Price List For More
MFJ Electronic Keyers

MFJ 407B

All the features of 401B

Plus

Front panel controls include linear speed, weight, tone and volume controls.

7" x 2" x 6"

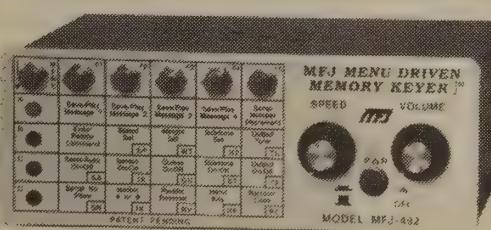


MFJ Super Menu Driven Memory Keyer

MFJ-493

You get all the features of the MFJ-492 plus all of these . . .

- 32,000 characters of memory
- Plug a standard PC 101 Keyboard
- Built-in serial port
- Use your computer to compose, build and store a complete library of often used messages
- FCC Exam Simulator
- MFJ's QSO Simulator
- Word Recognition Mode to practice recognizing entire words
- Compact 7 1/2 x 2 1/2 x 6 3/4 in.
- Uses 12 VDC or 110 VAC with MFJ-1312B



- Message Repeat
- Message Call
- Message Edit
- Built-in sidetone, speaker
- Tune feature
- Contest serial numbering
- Uses 9V battery (not included)
- 12 VDC or 110 VAC w/MFJ-1312B
- Compact 6 1/2 x 2 1/2 x 6 3/4 in.

Mirage . . . 35 Watts for handhelds!

B-34-G



MIRAGE
RUGGED!

For an incredibly low price, you can boost your 2 Meter handheld to 35 watts -- the power of an expensive mobile!

Your handheld becomes a powerful mobile or base when you need it -- for a lot less money.

Talk further . . . reach distant repeaters . . . log onto faraway packet bulletin boards.

This amplifier operates all modes: FM, SSB and CW.

A built-in low noise GaAsFET receive preamp gives you 18 dB gain -- lets you dig out weak signals

B-34

35 Watts - FM Only

35 watts out for 2 watts in. Similar to B-34-G but FM only, less preamp. Measures 3 1/8x1 3/4x4 1/4 inches

BD-35



Add this Mirage dual band amp and boost your handheld to a powerful mobile or base -- 45 watts on 2 Meters or 35 watts on 440 MHz!

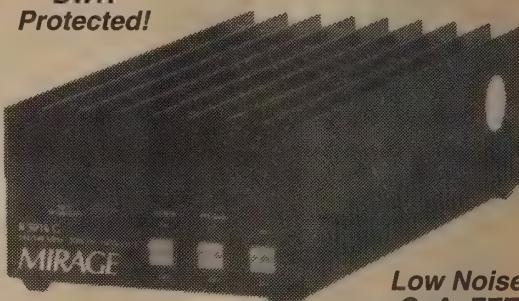
- 45 Watts on 2 Meters/35 W on 440 MHz
- Automatic Band Selection
- Single Connector for dual band radios and antennas
- Full Duplex Operation
- Reverse polarity protection
- One year Mirage Warranty
- Works with all FM handhelds up to 7W
- Includes mobile bracket
- 5 x 1 13/4 x 5 inches

Mirage Rugged!

The B-5016-G . . . 160 Watts on 2 Meters!

B-5016-G

SWR
Protected!



Low Noise
GaAsFET
Rx Preamp

MIRAGE's most popular amplifier gives you 160 watts of brute power for 50 watts input!

The B-5016-G is ideal for your 20 to 60 watt 2 Meter mobile or base station. 25 watts in-135 watts out . . . 50 watts in -160 watts out!

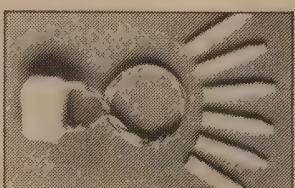
You will talk further, longer and clearer on all modes -- FM, SSB, or CW -- and hear weak signals better than you've ever heard before!

Low noise GaAsFET preamp gives you excellent 0.6 dB noise figure for pulling out weak signals. Select 20 dB or 15 dB gain to minimize receiver overload and intermod.

The B-5016-G prevents damage from high SWR by bypassing the power amplifier. LED warns you.

12 x 3 x 5 1/2 inches

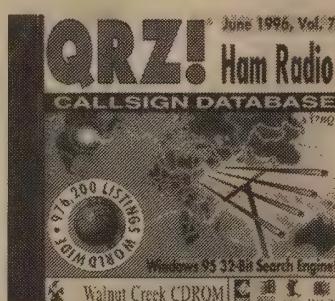
**Stop Telephone
RFI Forever
With K-COM**
Telephone Interference Filters



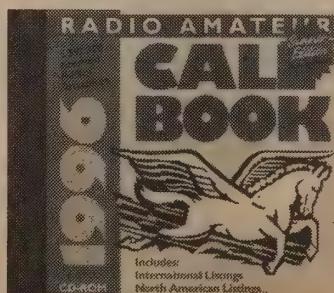
Model RF-1 Single Line. Modular filter for single line equipment.

Model RF-2 Hard Wired Filter. Installs in phone jacks, behind wall mounted telephones and throughout system wiring. Single line design. Also highly effective in blocking RF interference to security systems, intercoms and data lines.

| | | | |
|------|------------|------|-------|
| RF-1 | 3.0-30 MHz | 50dB | RJ-11 |
| RF-2 | 3.0-30MHz | 50dB | Crimp |



See QRZ! in price list!



See Radio Amateur Callbook in price list!

QRZ! Ham Radio CALLSIGN DATABASE

Nearly 1 million callsigns!

- 976,200+ Callsigns
- Over 3000 PC Amateur Radio Programs
- ARRL information files and bulletins
- Radio and scanner MODs
- Online FCC exam training software
- Computer radio control programs
- Contest logging software
- And much more!!

RADIO AMATEUR CALLBOOK

Includes:
International Listings
North American Listings

1,391,390 licensed Radio Amateurs

Data display by callsign, last name, street, city, state, zip, license class, issue and expiration dates, etc.

Prints labels from both Windows and DOS platforms.

Listings of clubs and QSL Managers

And more . . .

See price list for complete listing of ARRL publications!

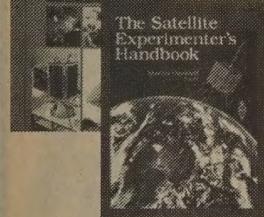
The 1996 ARRL Handbook 73nd Edition #1735

An indispensable reference for hams and engineers alike, The ARRL Handbook, with its 1184 pages and 2100 charts and illustrations, is an exceptional value. #1735 \$38

The ARRL Operating Manual has been updated to include the latest information about every aspect of our dynamic hobby. How to operate on a repeater or Packet Cluster. How to snare a contact through a DX pileup. What satellites are available and how to use them. Includes an ARRL DXCC Countries List, beam-heading information, a series of maps, US counties, sunrise/sunset table, and much, much more. #4939 \$22

The 1996-1997 ARRL Repeater Directory

includes more than 19,000 listings for voice and digital repeaters and propagation beacons located in North, Central and South America. This edition also lists more than 500 beacons from 14 MHz to 24 GHz. You'll also find band plans, a CTCSS tone chart and more. #5609 \$8



Weather Satellite Handbook by Dr. Ralph Taggart, WD8DQT, is for ANYONE with an interest in electronics, meteorology, earth science, image communications or computer science. Packed with projects, the 5th edition allows you to get in on the fun of monitoring a variety of weather satellites. #4483 \$20

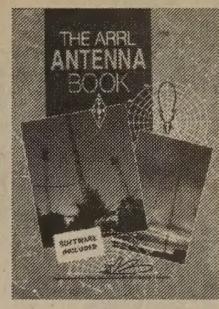
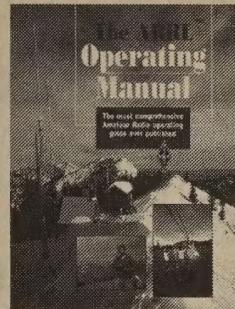
The ARRL UHF/Microwave Experimenter's Manual is written for the growing number of radio amateurs who are discovering that there is life on our frequencies above 420 MHz. Technicians and engineers will find this book particularly useful as the basis for understanding microwave technology. You'll find information on design and fabrication techniques, propagation, antenna and feed lines, transmission media and much more. #3126 \$20

Satellite Experimenter's Handbook has the information you need to communicate through or receive signals from a growing "fleet" of orbiting satellites. Whether your interest is in Amateur Radio, weather, TV-broadcast or other spacecraft, you'll find an immense store of valuable data. Everything from satellite design to ground station equipment and antennas. Written by Martin Davidoff, K2UBC. #3185 \$20

ARRL Satellite Anthology is a must for everyone interested in amateur satellites. A compilation of QST articles, it will show you how easy it is to track, decode telemetry from and communicate through such amateur satellites as AMSAT-OSCARs 10 and 13, the Russian RS series and the new Microsats. 4th edition. #5595 \$12



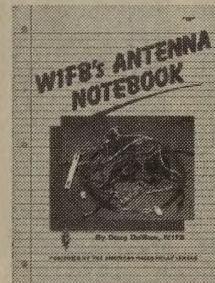
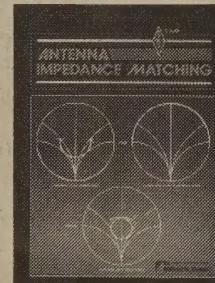
ARRL Publications



The ARRL Antenna Book is the definitive source for information on state-of-the-art antenna and transmission line theory and construction. The 17th edition presents the best and most highly regarded information on antenna fundamentals, propagation, transmission lines, Yagis and quads, as well as all popular wire antenna designs. Included with this edition is a diskette with software. #4734 \$30

The ARRL Antenna Compendium Series Each one is packed with previously unpublished articles on all the popular types of HF/VHF/UHF antennas. Volume 1 contains articles on multiband portable, quads, loops and baluns. Volume 2 features several verticals, an attic tri-bander, antenna modeling and propagation. Volume 3 has forty articles including 12 meter quad, a discone and many others. All three volumes are a feast for the antenna enthusiast.

| | | |
|------------------------------|-------|------|
| Antenna Compendium, Volume 1 | #0194 | \$10 |
| Antenna Compendium, Volume 2 | #2545 | \$14 |
| Antenna Compendium, Volume 3 | #4017 | \$14 |
| Antenna Compendium, Volume 4 | #4912 | \$20 |



Practical Wire Antennas, by John Heys, G3BDQ, is an RSGB book that delves into the practical aspects of HF wire antennas: how the various types work, and how to buy or build one that's right for you. Marconis, Windons, loops, dipoles and even underground antennas. #R878 \$14

Antennas and Techniques for Low Band DXing is an in-depth treatment of the antennas and operating strategies you'll need to span the continents on 40, 80 and 160 meters. #4661 \$20

| | | |
|---------------------------------|-------|-------|
| Practical Packet Radio | #5307 | 16.00 |
| Your Packet Companion | #3959 | 10.00 |
| Your Ham Companion-Ant Basics | #5110 | 10.00 |
| Your VHF Companion | #3878 | 8.00 |
| Your Mobile Companion | #5129 | 12.00 |
| QRP Power | #5617 | 12.00 |
| Vertical Antenna Classics | #5218 | 12.00 |
| Beyond Line of Sight | #4025 | 12.00 |
| Intro to Radio Frequency Design | #4920 | 30.00 |
| RFI: How to Find and Fix It | #3754 | 18.00 |
| Ham Radio Made Easy | #5374 | 16.00 |
| UHF/Microwave Projects Manual | #4491 | 20.00 |
| Understanding Basic Electronics | #3983 | 20.00 |

See price list for complete listing of books and practice code tapes!



W5YI has the right book for you! Novice, Tech+, General, Advanced, Extra

Everything You need to Upgrade - the Quick and Easy Way!

- Fully Illustrated Text
- Handy Formulas for Each Class
- Frequency Chart Showing Privileges
- FCC Form 610 Application
- Enjoy Increased Frequency Privileges
- Contains All Test Questions

- Explanations of Correct Multiple Choice Answers
- List of Examiners - VECs
- FCC License Preparation
- Study Hints and Instructions
- Includes Charts and Diagrams



No-Code Ham Radio Software Package

Everything you need to know to pass the examination for the Codeless Technician. Learn to be a ham operator right at your PC! Complete with 232 page manual and FCC Part 97 Rule Book.



Ham Operator Software with Code Practice

Covers Novice through Amateur Extra Class. Study at your PC for all FCC license tests. Teaches the Morse code and builds speed past 20 wpm. Complete with current FCC Part 97 Amateur Radio Rule Book.



General Upgrade Software Package

Upgrade to the General Class and work HF! Software teaches Morse Code and builds speed to 13 wpm and beyond. Print out sample written tests. 112 page manual and FCC Part 97 Rule Book.



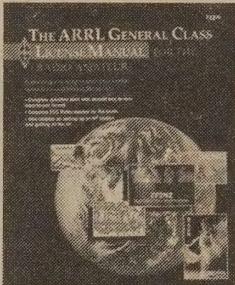
Computer Aided Instruction Extra Upgrade Software Package

Advanced Upgrade Software Package

Includes instruction manual, FCC Rule Book and Morse Academy for Morse Code practice!



See price list for complete listing of ARRL Publications!



ARRL LICENSE MANUALS

Now You're Talking

All You Need To Get Your First Ham Radio License

This book covers everything you need to know to earn your first Amateur Radio license. More than a study guide, it will help you select equipment for your ham radio station and even explain how to set it up!

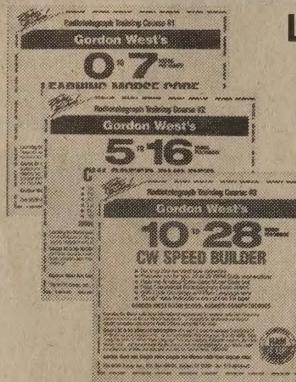
Whether you're interested in the codeless Technician license or the traditional Novice ticket, with **Now You're Talking!**, it's easier than ever to become a ham radio operator! #4173

Upgrade Your License The Easy Way!

The ARRL License Manual Series represents the best study material for the General, Advanced and Extra Class Amateur Radio exams. The appropriate examination question pool, complete with an answer key, is included for easy reference. The answer key contains page references so you can locate appropriate text explanations as you review the questions before your exam.

ARRL License Manual Series

| | |
|---|-------|
| Now You're Talking (Thru June 30, 1997) | #4173 |
| General Class (Thru June 30, 1998) | #4688 |
| Advanced Class (Thru June 30, 1999) | #4947 |
| Extra Class (Thru June 30, 2000) | #5390 |
| FCC Rule Book | 45102 |



ARRL Code Practice Cassettes

Each set of two C-90 tapes provides three hours of practice.

Your Introduction

| | |
|-----------------------|-------|
| To Morse Code 0-5 WPM | #3487 |
| Set 1: 5 to 10 WPM | #2227 |
| Set 2: 10 to 15 WPM | #2235 |
| Set 3: 15 to 22 WPM | #2243 |
| Set 4: 13 to 14 WPM | #2251 |

GGTE Morse Tutor - 3.5" Disk



Premier Communications-ADI

on Target for You

Coming Soon!
NEW
Dual Band HT
AT 600

Mobiles

AR-446 :

- UHF Mobile Radio
- 5/10/35w
- Encode/Decode
- 40 Memories + Call Channel
- Scans, pages, decodes & displays received DTMF signals
- Modifiable for MARS, CAP
- Display operating freq. or channel number



AR-446
AR-146

AR-146 :

- 144-148 MHz
- RX 138-174 MHz
- Power: VHF: 50/10/5w
- Frequency Lock
- Auto Power Off
- Dual Tone Squelch System Paging
- 16 Digit DTMF Decode and Display
- CTCSS Encode/ Decode (included)
- Multi Function DTMF Microphone
- Selectable Frequency Steps
- Carrier or Timer Scan Stop
- Memory/Band Scan
- 40 Memory Channels
- 4 Step Display Dimmer
- Mars/Cap Capable
- Time Out Timer
- Dual Frequency Watch

Speaker/Mics

Fits Yaesu, Icom, Alinco, Kenwood, ADI, Standard & Motorola



SPM-100



SP 400/401

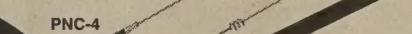
Mobile Antennas

Features

- 1:1 SWR at 146.50 MHz
- Exclusive New Connection System
- Mating Mounts available
- Handles Up to 100 Watts
- Sturdy, Efficient Design
- Higher gain design
- Fold-Over Mast
- Two Hot Models



PNC-2



PNC-4

HT Antennas

RD-78 : Dual Band 15" HT Antenna
• 2.15 dbi/3db, also for scanning

RD-8 : Dual Band 6" HT Antenna
• 900 MHz, also for scanning

RD-98 : Dual Band 17" HT Antenna

AL-800 : Dual Band Telescoping Antenna
• 2 in 1. 144/445 3.2/5.6 db

AT-401



AT-201/2M : 130-179 MHz

AT-401/70cm : 430-450 MHz

- Extended Receive Coverage
- 40 Memories
- Stores Any TX Offset and CTCSS Tone in any Memory
- Automatic Repeater Offset
- Full Range Scanning or 1 MHz Range Scanning
- Memory Group Scanning



AT-201

Base Antennas

• A-1000 3 Sec. 17.5' 8.5/11.8dB

• A-300 2 Sec. 11' 6.5/9db

• A-200 1 Sec. 5.9' 4.5/7.2 db

- Fiberglass Radome
- High Wind Rating
- No Tuning Required
- 100% Weather Proof
- Maximum Gain
- Full One Year Warranty

"The Power Station"

SB-752



- Charge while driving car
- 3, 6, 9 & 12V Selectable
- 8"H x 4.5"D x 7.5"W @ 8#
- Voltmeter

C156A

**STANDARD'S QUALITY!
STANDARD'S FEATURES!
EVERYBODY'S PRICE!**

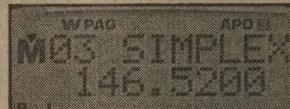
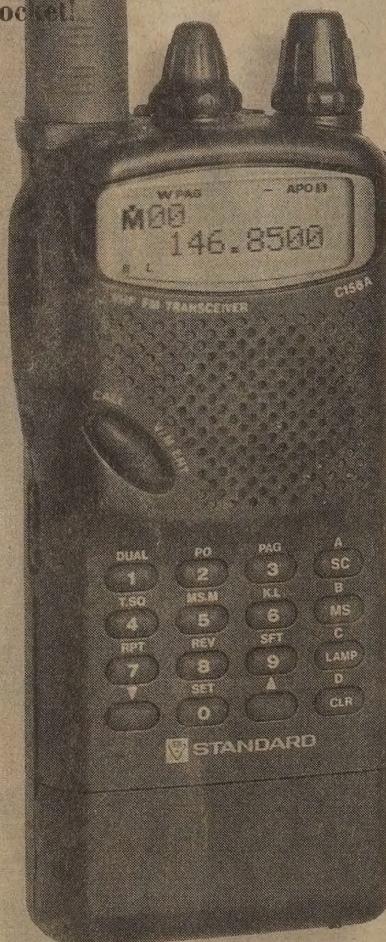
Standard's new C156A is indeed a hand-held that everyone can afford, yet it boasts all the user-friendly features that Standard users have come to expect. Take a look at the bright, clear Dot-Matrix display, with alpha-numeric ID as well as frequency, then look at these other features:

- 100 Memory Channels plus CALL and VFO
- CTCSS - 39 tones built-in
- Battery Save 1, 2, 3, 4 or 5 Sec
- Auto-Power-Off 30, 60, 90 or 120 min
- Dual Watch mode
- Scan - 1 MHz, All, Program, Memory, Block memory, Memory Scan Memory and CTCSS (with optional CTN115) and much, much more! Comes with "AA" penlight cell pack, so you need never run out of battery. All this in a Standard - for under \$200! See your Standard dealer today and you'll go home with a C156A in your pocket!

SPECIFICATIONS

- Frequency Coverage
VHF RX 135.000-174.000 MHz
TX 144.000-147.995 MHz*
- Frequency steps, 5, 10, 12.5, 15, 20, 25, 30 and 50 kHz
- Scan: Pause, Busy or Hold
- Store: Alpha-Numeric Titles, Repeater, Offset frequency,
- Paging, Code Squelch, Tone Encode; Tone Decode with optional CTN115
- Auto repeater offset
- Built-in 1750 Tone Burst
- PTT lock
- Keyboard lock
- Auto Squelch 8 settings
- TX Time-Out Timer
- Paging/Code Squelch
- Wake-up receive mode
- 9 DTMF memories
- 3 power levels: H, M, L
- Back-lighted display
- DTMF Paging and Coded Squelch
- Direct Frequency Input with Keypad
- Unsurpassed Intermod Rejection
- Size approx: 2.28" W, 4.92" H, 1.02" D;
Weight approx: 10.6 oz
- C156A supplied with CBT156 dry battery case for 4 "AA" batteries.
(batteries not included)

*CAP/Mars Transmit with appropriate Permit



OPTIONAL ACCESSORIES

- CAW151B Power Cable for Base Station
- CAW152B Mobile Cord with Noise Filter
- CHP111 Head Set with PTT
- CHP150 Head Set with VOX
- CLC155 Soft Case (CNB155/156)
- CLC156 Soft Case (CBT156)
- CLC157 Soft Case CNB157/CBT158
- CMB112 Mobile Bracket
- CMB600 Helmet Clip for CHP150
- CMC150 Mobile Charger (CNB155/156/158)
- CMP111 Speaker Microphone
- CMP113 Tie-pin Speaker Microphone
- CMP115 Small Speaker Microphone
- CNB155 4.8V 600 mAh Small Battery (1.8 Watt Output)
- CNB156 6.0V 600 mAh Standard Battery (2.8 Watt Output)
- CNB157 9.6V 600 mAh High Power Battery (5 Watt Output)
- CNB158 6.0V 1200 mAh Long-life Battery (2.8 Watt Output)
- CSA181AB Desk Top Charger
- CTN115 CTCSS Decode Module
- CWC156A Wall Charger (CNB155/156/158)
- CWC151A Wall Charger (CNB157)



For more information on this and other STANDARD products, please contact your nearest STANDARD dealer. Specifications, price and features are subject to change without obligation or notice. Standard Amateur Radio Products, Inc. P.O. Box 48480, Niles, Illinois 60714.

Tel (312) 763-0081
Fax (312) 763-3377



STANDARD®

